

LIST PRICE CATALOG-LEW BONN CO.

STAR LINES
OF RADIO

THE
FRIENDLY HAM
SUPPLY HOUSE

STAR-LINE
RADIOS

RADIO DEALERS
AND SERVICE MENS
HEADQUARTERS

BUSINESS SPACE
3 TIMES LARGER
THAN OLD LOCATION

RADIO

*New
Location*

1124-26 HARMON PLACE
MINNEAPOLIS,

MINN.

FOR ALL
MAIL ORDERS

COMPLETE

SUPPLIES

DAYS QUICKER
SERVICE

BRANCH AT 506 ROBERT

ST., ST. PAUL
FULL LINE
TEST EQUIPMENT

SATISFACTION GUARANTEED
WITH EVERY SALE!

SEE
PAGES
1 & 2

SHORT WAVE
SPECIALISTS

1936

LIST PRICE CATALOG

RCA
RAYTHEON

LEW BONN CO.

The Complete Stock Radio Wholesaler

1124-26 HARMON PLACE

MINNEAPOLIS, MINN.

Mid-American Radio Headquarters

THE FIRST GENUINE 1936 COMPLETE RADIO CATALOG FEATURING THE STAR LINES OF RADIO



LEW BONN
PRESIDENT
AND
GENERAL MANAGER

REX L. MUNGER
W9LIP
SALES ENGINEER



THE PIONEER OF LIST PRICE CATALOGS

IN THE RADIO PARTS FIELD
offers AGAIN a

List Price Catalog

The First Genuine, Complete, 1936 Catalog
FEELING THAT

1,500 DEALERS CAN'T BE WRONG

We have received letters from over 1,500 dealers and servicemen who tell us that they want a List Price Catalog. The servicemen and dealers in the Twin Cities are 100 per cent in favor of List Price Catalogs. The amateurs tell us that they don't object to it—so we will stick with our ideas until you tell us differently. Again, we urge you to give us your views on this subject.

PROGRESS

The Lew Bonn Co. has continually grown larger—year after year. The year 1935 brought our greatest success. During this past year we have

EXPANDED OUR BUSINESS QUARTERS

300%

and

INCREASED OUR PARTS INVENTORY

200%

Our new quarters are laid out systematically so that every department is able to function at 100 per cent efficiency all the time. Our stock room is very large and contains one of the five largest stocks of radio parts in the world. This merchandise is all "brand new"—no "job lot junk" at Lew Bonn's. We are the only radio parts distributors in the Twin Cities, Minnesota, Wisconsin or the Dakotas who carry the "hard-to-get" parts along with the "fast sellers." We believe that those distributors who really do carry complete stocks really merit your business—and we feel that we are so located that we can render better and faster service to thousands of you.

We are
100% WHOLESALE

and are anxious to co-operate with you in seeing that many bad practices, now in existence, are curbed. We, again, ask all amateurs and experimenters to protect their right to buy at wholesale prices by guarding their catalogs from the public's view and by refraining from buying for relatives, friends or neighbors. Co-operate with the radio dealers and servicemen at all times—you've got a good "deal" now—hold onto it.

Your comments on this catalog and its contents, as well as our service, will be appreciated.

LEW BONN CO. offers for the first time THE OUTSTANDING LINE OF 1936 RADIO RECEIVERS



These receivers are offered for sale anywhere this catalog is mailed—no territory restrictions.

Please look over these new radio receivers on pages 3 to 6. You will find a complete line of radios incorporating every desirable feature at true Value-Plus prices (see Net Prices on page 2).

STORE HOURS

MINNEAPOLIS and SAINT PAUL STORES

WEEK DAYS—8:30 A. M. to 5:30 P. M.

SATURDAYS—8:30 A. M. to 4:00 P. M.

St. Paul store open from 7:00 P. M. to 8:00 P. M. the first Friday of each month from September through to May.

Minneapolis store open from 7:00 P. M. to 8:00 P. M. the second Thursday of each month from September through to May.

SUMMER

During June, July, August both stores will close at 1:30 P. M. on Saturdays.

Fast Delivery Service in Twin Cities

We use a commercial delivery service that gives very prompt service. We can get merchandise to any part of Minneapolis or St. Paul within two to three hours. If you can't come over, telephone, and have your order delivered.

Minneapolis
MA in 5313

St. Paul
GA rfield 2100

SPECIALIZED SERVICE

We maintain the following Special Departments:

SOUND

P. A. Systems, Microphones, Speakers

SHORT WAVE

Receivers, Transmitters

TECHNICAL RECEIVERS Service Problems

All of these departments are operating for your benefit and each one is completely equipped to help you in any way you may desire. WARD JENSEN, W9TLE, is in charge of all specialized departments. His many years of radio experience well qualify him to help you in planning new equipment or solving any radio problem. Call on or write to Ward when you need technical advice.

OUR SOUND DEPARTMENT

is one of the most complete in the industry. This department is under the able direction of RALPH BOLAND, who has had many years of experience in the public address equipment field. Ralph has the equipment and the knowledge necessary to recommend to you the right apparatus for any sound job. In this department you will find such features as: Sound-Proof Room, several Oscilloscopes, Audio and R. F. Oscillators, Calibrated Microphones and Speakers, etc. During the past few years the Lew Bonn Co. has sold through its dealers many of the finest and largest public address installations in the Midwest. We also specialize in hard-of-hearing installations. See the Lew Bonn Sound Department if you want the best in equipment and service.

OUR SHORT WAVE DEPARTMENT

is able to service your "Ham" receiver and is equipped to build any special amplifier or transmitter you may want. All letters asking technical questions are promptly and cheerfully answered. We have the following well qualified radio men to serve you:

Ben Miller—W9DKL
Art Kasseth—W9HOP
Jerry Jensen
Charles Engelman
Fred Kennedy
Les Grube—W9LEX
E. Goodsell
Harry Gruber
Roy Heden—W9HRH

AGAIN!

This is a

AGAIN!

"LIST PRICE" CATALOG

Everything on

PAGES 3 to 11

**"TRUE LIST"
PRICES**

See Net Prices and Discounts

on Page 2 *Back Side
of This Page*

PAGES 12 to 72

**"D-N LIST"
PRICES**

"DIVIDE BY TWO" TO GET YOUR COST.

We take the Factory Suggested Dealer Net Price and multiply by two. You get your Net Cost by dividing prices shown by two.

PAGES 73 to 122

**"NET"
PRICES**

Prices shown from Page 73 to Page 122 are your Net Costs—except for the Discount for Cash. We allow an extra 2% to be deducted from all "Cash With Order" orders of \$2.00 and over and we allow this 2% on all C. O. D. orders of over \$3.00 (except on National Co. apparatus).

For your convenience, to assist you in determining what prices are in effect on each page you can use this system: On the bottom of each page you will find these words—"True List," "D-N List" and "Net Prices."

"TRUE LIST" means regular Factory List. (You will find net prices and discounts on Page 2.)

"D-N LIST" means "Double the Net" prices and you divide prices shown by 2 to determine your net cost.

"NET PRICES" mean that the prices shown are your actual costs except for the 2% discount for cash if your order qualifies.

We believe that this system of pricing a

"List Price" catalog is as simple as any method possible. You should remove this page and save it for future reference so that the consumers cannot see it. Remember, please, that we are not using this system to make our "Discounts" look better — the main idea is a simplified system that makes it unnecessary to refer to a "Discount Page" when quoting prices to a consumer. A majority of you told us that this was necessary and you applauded our last catalog by letters and by orders—so here it is again—further simplified, and covering a much wider range of merchandise. We sincerely hope you will find our catalog to be of great use to you in your daily work. Your comments will be greatly appreciated and carefully considered.

IMPORTANT! READ THIS! You Get 2% Cash Discount

When you figure out your net cost you still get a 2% Cash Discount on all items in this catalog (except on National Co. apparatus) if your cash with order exceeds \$2.00 or if your C. O. D. order exceeds \$3.00. Remember that when looking at prices on Radio Sets, Test Equipment and other items in this catalog.

This is a

"LIST PRICE" CATALOG

Read Pages 1, 2 and 124 Before Ordering

LEW BONN CO.

"The Pioneer"

First in the Radio Parts Supply Industry To Present a "List" Price Catalog

Here are your net costs on all items on pages 3 to 11

REMEMBER—You get a 2% cash discount from these prices.

Page 3

Model 41.....	\$ 9.18	Standard
Model 43.....	10.10	Asst. K
Model 44.....	10.10	\$56.95
Model 47.....	10.10	You save
Model 48.....	10.10	\$1.80
Carrying Case.....	.90	
Model 66.....	14.25	Asst. 402
		\$8.65
		You save
		\$6.28

Page 4

Model Z242.....	\$21.75
Model AZ282.....	29.75
Model CL684.....	44.45
Model L567.....	29.95
Model CL583.....	39.75
Model L668.....	32.75
Model AZ2.....	19.95
Model CL6.....	32.95

Page 5

Model 5D.....	\$14.54
Model C110.....	20.36
Model M169.....	23.85

Page 6

Model B4TB.....	\$20.30
Model B5TB.....	23.25
Model B7TB.....	29.05
Model B7TBC.....	40.40
Model B532B.....	20.30
Model B932B.....	23.25
Model B932AW.....	29.05
Model B932C.....	55.60
Model B932AWC.....	40.40
Model B2VT.....	14.23

Pages 7-8-9 RCA AND RAYTHEON TUBES

NET PRICES

Type	Raytheon	RCA	Type	Raytheon	RCA	Type	Raytheon	RCA
1A6.....	\$0.69	\$0.75	22.....	\$0.69	\$0.75	76.....	\$0.38	\$0.42
1B5/25.....	.69	.75	24A.....	.51	.53	77.....	.56	.60
1C6.....	.82	.90	26.....	.33	.35	78.....	.56	.60
2A3.....	.69	.75	27.....	.38	.42	79.....	.69	.75
2A3H.....	.69	.75	30.....	.38	.42	80.....	.33	.35
2A5.....	.56	.60	31.....	.38	.42	81.....	1.07	1.20
2A6.....	.56	.60	32.....	.69	.75	82.....	.51	.53
2A7.....	.69	.75	33.....	.56	.60	83.....	.51	.53
2B6.....	1.25	.90	34.....	.69	.75	83V.....	.32	.35
2B7.....	.69	.75	35/51.....	.51	.53	85.....	.56	.60
5Z3.....	.51	.53	36.....	.51	.53	89.....	.56	.60
6A3.....	.33	.35	37.....	.38	.42	X99.....	.56	.60
6A6.....	.69	.75	38.....	.51	.53	864.....	1.20	1.60
6A7.....	.69	.75	39/44.....	.51	.53	BA.....	3.85	4.60
6B5.....	1.25	.90	41.....	.51	.53	BH.....	2.38	2.70
6B7.....	.69	.75	42.....	.56	.60	BR.....	1.41	1.60
6C6.....	.56	.60	43.....	.56	.60			
6D6.....	.51	.53	45.....	.56	.60			
6E5.....	.69	.75	46.....	.56	.60			
6F7.....	.32	.35	47.....	.51	.53			
6Z4/84.....	.69	.75	48.....	1.33	1.50			
12A5.....	1.07	.90	49.....	.56	.60	5Z4.....	\$0.86	\$0.86
12A7.....	1.13	.90	50.....	1.33	1.50	6A3.....	.94	.94
12Z3.....	.56	.60	53.....	.69	.75	6C5.....	.67	.67
25Z5.....	.56	.60	55.....	.56	.60	6F5.....	.67	.67
01A.....	.33	.35	56.....	.38	.42	6F6.....	.81	.81
1V.....	.51	.53	57.....	.51	.53	6H6.....	.67	.67
10.....	1.07	1.20	58.....	.51	.53	6J7.....	.86	.86
12A.....	.33	.42	59.....	.69	.75	6K7.....	.31	.31
15.....	1.02	.80	71A.....	.38	.42	6L7.....	.94	.94
19.....	.56	.60	75.....	.56	.60	6Q7.....	1.08	1.08
						25A6.....	.94	.94
						25Z6.....	.94	.94

MAJESTIC SHIELDED TYPES

Type	Raytheon
2A75.....	\$1.24
2S/4S.....	1.43
2Z2/G84.....	1.00
6A7S.....	1.24
6B7S.....	1.13
6C7.....	1.03
6D7.....	.95
6E7.....	.95
6F7S.....	1.03
6Y5.....	1.03
6Z5.....	1.03
2A8.....	.70
2T8.....	.43
35S/51S.....	.76
46A1.....	.59
46B1.....	.59
55S.....	.92
56AS.....	.70
56S.....	.70
57AS.....	.95
57S.....	.95
58AS.....	.95
58S.....	.95
75S.....	.92
85AS.....	.92

METAL TUBES

Type	Raytheon	RCA
5Z4.....	\$0.86	\$0.86
6A3.....	.94	.94
6C5.....	.67	.67
6F5.....	.67	.67
6F6.....	.81	.81
6H6.....	.67	.67
6J7.....	.86	.86
6K7.....	.31	.31
6L7.....	.94	.94
6Q7.....	1.08	1.08
25A6.....	.94	.94
25Z6.....	.94	.94

The Raytheon net prices as shown above are arrived at by figuring a 40-10-5% discount from the Raytheon list prices shown on pages 8 and 9. If your order totals 25 Raytheon tubes of assorted types you may deduct another 10% from the above net prices. If you use tubes in large quantities we urge you to write to us for special quantity discounts.

The RCA net prices as shown above are arrived at by figuring a 40% discount from the RCA list prices shown on page 7. If your order totals 25 RCA tubes of assorted types you may deduct another 10% from the above net prices. If you use tubes in large quantities we urge you to write to us for special quantity discounts.

Page 10 Sparton—Kellogg—Tungar

SPARTON

NET PRICES

Type	Price	Type	Price
25S.....	\$1.62	482B.....	\$0.99
70.....	1.14	483.....	.99
181.....	1.14	484A.....	1.56
401.....	1.14	485.....	.87
482A.....	1.56	486.....	2.46

TUNGAR

Type	Price
277465.....	\$3.00
189049.....	6.00
289881.....	3.00
195528.....	3.00

KELLOGG

Type	Price
401.....	\$2.40
403.....	2.70
NAT. UNION RECTIFIERS	
NU-2.....	\$2.40
NU-6.....	4.80

On Sparton tubes you may deduct an extra 10% if you purchase 50 tubes in one shipment.

Page 11 EVEREADY BATTERIES

NET PRICES

Cat. No.	Each Bat.	Less Than Case Lot
435.....	\$1.32	\$1.45
486.....	1.67	1.84
572.....	1.25	.90
670.....	1.35	1.38
762.....	.60	1.05
768.....	.60	.66
A600.....		4.17
SA850.....		5.25

Cat. No.	Each Bat.	Less Than Case Lot
771.....	\$0.25	\$0.28
763.....	.53	.58
781.....	.28	.31
773.....	.44	.49
783.....	.88	.97
711.....	.28	.31
X124.....		5.25
X125.....		2.68
No. 1.....		.065
No. 2.....		.065

Cat. No.	Each
B-180.....	\$2.95
B2246.....	3.95
B6112.....	4.85
B6135.....	5.95
B6160.....	6.95
B6181.....	7.65
B6203.....	9.95

PIONEER AIRFLO CHARGER

Complete.....\$16.00

EVERYTHING ON
PAGES 12 TO 72
"D-N LIST"
DIVIDE BY TWO
FOR YOUR COST

2% CASH DISCOUNT

You may deduct 2% from all prices in this catalog (except on National Co. apparatus) IF your order is a "Cash with order" of \$2.00 and over. On all C. O. D. orders of \$3.00 and over we will allow you the 2%. Orders under \$1.00 will be charged a 15-cent service charge. Read page 124 before ordering. We furnish order blanks—ask for them, and when you think of tubes, order from Lew Bonn Co.

KADETTE

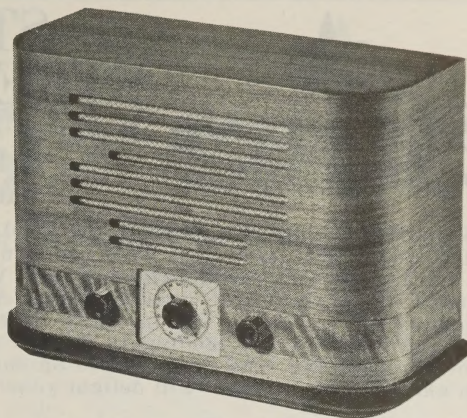
Sixty Six

The Sales Leader in the new 1936 Kadette Line. Introduced only one month ago, already thousands have been sold. Here is a real "quality" radio, sharply selective with amazing performance and brilliant tone. The cabinet is one of the most beautiful ever designed—and of a quality never before found in this price class. The performance of this De Luxe Set will amaze you. Covers standard broadcast, amateur, aviation and all police bands. Size 13 3/8 inches wide, 9 inches high and 6 inches deep.

\$19.95

LIST

- ◆ Six Tube A.C.-D.C.
- ◆ Superheterodyne.
- ◆ Illuminated Full Vision Dial.
- ◆ Dynamic Speaker.
- ◆ Impregnated Coils.
- ◆ Voltage Regulator Tube (No Line Cord).
- ◆ Rustproof Chassis.
- ◆ Fully Shielded.



6 TUBE A.C.-D.C. SUPERHETERODYNE

Two Bands

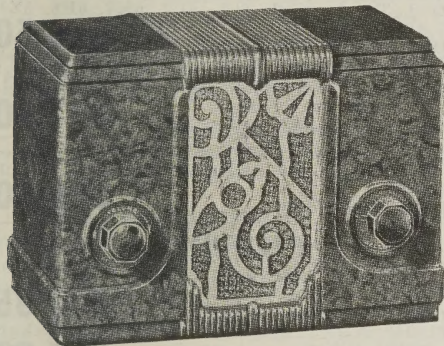
550 to 1,600 Kc.

1,600 to 4,400 Kc.

Beautiful modernistic cabinet of selected American walnut with band inlay of rich cross fire oriental walnut. Polished black ebony base. Illuminated full vision dial.

10,000 DEALERS CAN'T BE WRONG!

The International Radio Corporation has always recognized the importance of maintaining an adequate number of dealers and by complete factory cooperation in the matter of discounts, advertising, merchandising plans and sales helps, make it easy for every dealer to make money. Circulars, wall posters and window displays furnished free on all models.



INTERNATIONAL KADETTE

only \$ **13.50**

Jewel

THE WORLD'S MOST BEAUTIFUL—MOST COMPACT RADIO!

◆ **Lifetime Scratchproof Moulded Bakelite Cabinets.**

◆ **Tenite Jewel Speaker Grilles.**

◆ **Glorious Colors.**

◆ **Compact Size—Only 5 1/2 Inches High, 7 1/2 Inches Wide, and 3 3/4 Inches Deep.**

◆ **Weights Only 3 3/4 Pounds.**

◆ **4 Tube Performance.**

◆ **Works on A.C. or D.C.**

The Kadette Jewel Compact Radios are tried and proven. Many thousands of these sets are daily giving complete satisfaction to their owners. They are three tube radios with two full tuned circuits employing one 6C6 as radio frequency amplifier, one 6C6 as a detector and one 12A7 as combination rectifier, and output tube—this tube has two elements which actually gives the performance of four tubes. New balanced armature speaker produces a fine full tone. Tunes entire broadcast band 550 to 1,600 KC.

GUARANTEE AND SERVICE AGREEMENT:—Standard RMA 90-day warranty from date of purchase against all imperfect workmanship and material. Also carrying the famous "one dollar—one year" parcel post service policy. Any owner can mail his Kadette direct to the factory with \$1.00 and set will be returned in first class condition, transportation prepaid.

PRICE LIST

Model 41—Walnut Bakelite.....	\$13.50
Model 43—De Luxe Ivory Plaskon.....	16.50
Model 44—De Luxe Red Plaskon.....	16.50
Model 47—De Luxe Black Pearl Plaskon.....	16.50
Model 48—De Luxe Marble Plaskon.....	16.50
Fawn Colored Suede Zipper Carrying Case.....	1.50

STANDARD ASSORTMENT K

2 Model 41; 1 Model 43; 1 Model 44; 1 Model 47; 1 Model 48; Assortment of Sales Helps.

SEE PAGE 2

for Extra Profits by buying this assortment.

STANDARD ASSORTMENT NO. 402 A SMART INVESTMENT FOR DEALERS

Cabinets and Beautiful Window Display

Here is an eye-stopping and attention-getting salesman that works for you night and day for nothing but the electricity used by one light bulb. Dealer has no dead money tied up as cabinets can all later be converted into salable complete sets at such time as he feels that complete window display has served its purpose. Chassis to fit cabinets can be ordered through distributor (see page 2). Also if a customer desires some particular color dealer does not have in stock, he can easily take a chassis from any set in stock and transfer it into any one of the dummy cabinets. By having these dummy cabinets instead of actual radio sets dealer saves himself a large investment (see page 2).

DISPLAY FREE AND CABINETS LESS THAN COST. You get one each of the cabinets (five in all); one zipper carrying case and the new large attractive window display. See page 2 for your costs—this saves you money and gives you the advantages of a large stock with a minimum investment.

"TRUE LIST"



STAR-LINE STREAMLINE SIX

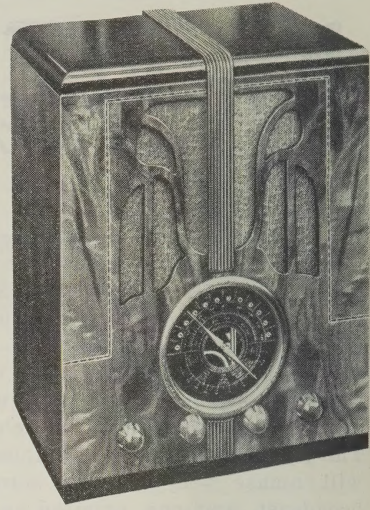
6 Tube A. C. Superheterodyne
3 Bands—All Wave
Latest 1936 Model

TWO METAL TUBES, LARGE 5-INCH DIAL. Full band coverage from 540 to 16,000 Kc. Three-gang condenser. Tubes used: 6A7, 6D6, 6F5, 6H6, 42 and 80. Six-inch full dynamic speaker. Variable tone control. Sturdily constructed of beautiful figured walnut with a new streamline effect extending from top to bottom through center of cabinet. We cannot recommend this radio too highly. It has everything to make it a real "hot" sales leader. The performance on short wave reception will amaze you and the rich full tone will delight your customers.

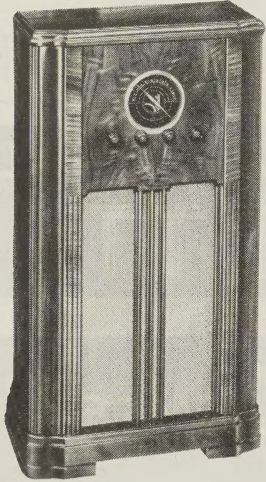
Size 15¼x12½x7⅞ inches.

MODEL Z242

\$39.50
LIST



STAR-LINE STREAMLINE SIX CONSOLE



Chassis specifications are the same as on the Streamline Six Mantel Set except that a De Luxe type 8-inch full dynamic speaker is used. Console is full size—36x20x10 inches, and is of the very latest design. The panel is of selected figured walnut. Inlay panels are striped walnut and are fluted at lower ends. The speaker grille is recessed. This model is a new 1936 set and will sell to those who really know radio values.

STREAMLINE SIX. **\$55.50**
MODEL AZ282 --- LIST

OTHER STAR-LINE MODELS

Not Illustrated

7 TUBE TABLE MODEL—All metal tubes, 3 bands, all wave, 8-inch dial, 3-gang condenser, 8-inch dynamic speaker, variable tone control. Tubes used: 6C5, 6L7, 6K7, 6F6, 5Z4, 6H6, and 6F5. **\$54.50**

MODEL L567—List.....
7 TUBE CONSOLE—Same as Model L567 except speaker is 12-inch super dynamic. Console is 39½x22x11 inches. **\$77.50**

MODEL CL583—List.....
8 TUBE TABLE MODEL—Same as Model CL684 listed below except speaker is 8-inch dynamic. **\$64.50**

MODEL L668—List.....

CHASSIS

6 TUBE A. C. CHASSIS—8-inch speaker. **\$29.95**

MODEL AZ2—List.....

8 TUBE A. C. CHASSIS—12-inch speaker. All metal tubes. **\$55.00**

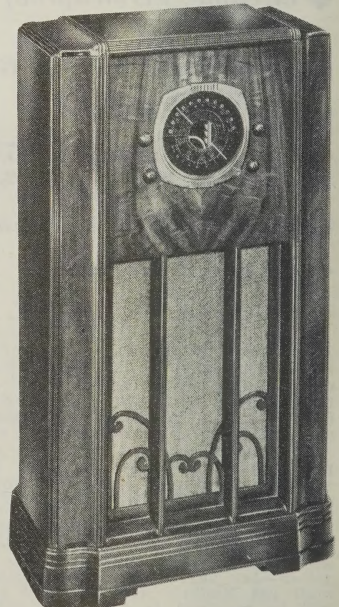
MODEL CL6—List.....

STAR-LINE "DE LUXE EIGHT"

8 Tube (All Metal Tubes) A. C. Superheterodyne
10 Watts Audio—Straight Class A
Super Giant 12-Inch Dynamic Speaker
8-Inch Multi-Colored Dial
3 Bands—All Wave

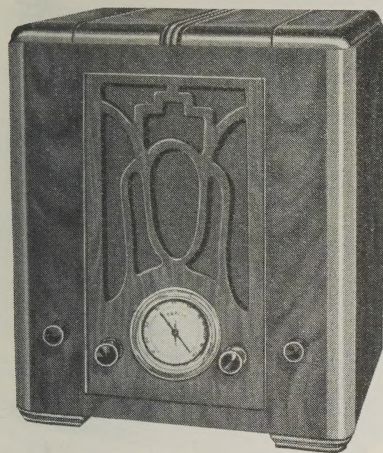
Here is a truly "de luxe" radio. The moment you see the massive beauty of this console with the deep recessed grille and the richly figured walnut panels, you will be "all for it." And so will your customers. The De Luxe Eight incorporates every desirable 1936 feature. Eight metal tubes: 6C5, 6L7, 6K7, 6Q7, 6Q7, 6F6, 6F6 and 5Z4. Phase inversion push-pull audio circuit. Three-gang condenser. Variable tone control. The dial is the new 8-inch colored type. Full coverage from 540 to 16,000 Kc. on 3 bands. Full A.V.C. circuit. Extremely low noise level, especially noticeable on short wave lengths. The tremendous power of this radio is easily and beautifully handled by the Super Giant 12-inch dynamic speaker. The De Luxe Eight can be demonstrated against any other radio and in the large majority of cases, the richer, fuller tone of this radio will swing the sale. Console is 39½x22x11 inches, which is the size that has proven acceptable to the most people. We strongly urge you to check the specifications of this set against others of the same price. You will find that the De Luxe Eight is the outstanding value in every respect.

MODEL CL684—List - - - - - **\$89.50**



"TRUE LIST"

STAR-LINE "FIVE"—OUR SALES LEADER!



Model 5D

\$19.95
LIST


5 Tube A. C. Superheterodyne
Two Bands—A.V.C.

FULL TONE—EXTRA SELECTIVE—SUPER SENSITIVE

Walnut cabinet of latest, most popular type. Polished piano finish. Seven-tube performance through use of dual purpose tubes: 6A7, 6D6, 75, 42 and 80. Six-inch full dynamic speaker. Very effective automatic volume control. Two-gang ball bearing condenser; Litz coils. Illuminated airplane dial, 8 to 1 ratio. Covers 550 to 1,600 Kc. and 1,600 to 4,000 Kc. which takes in full broadcast band, all police bands, plus amateur and aviation bands. This set has unusually good pick-up bringing in WNAX, Yankton, and WMT, Waterloo, with very good volume right in downtown Minneapolis. The performance and tone of this radio will clinch many sales for you. You will find a chassis and construction that will please you. Sturdily and scientifically built to give many years of satisfaction. This is not a cheap "bargain" set! An outstanding value at **\$19.95**. (See page 2 for dealer's price.)

STAR-LINE "DX FIVE"

Real Foreign Reception!

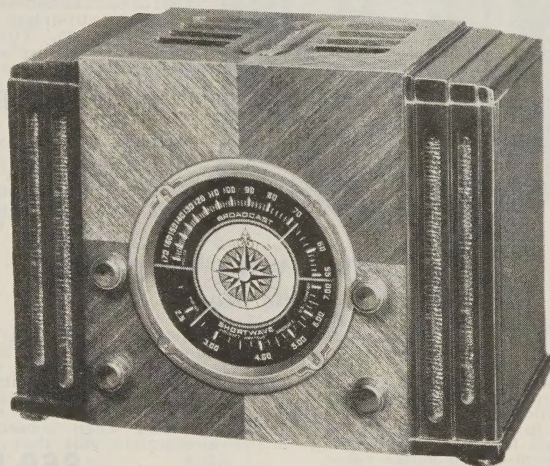
5 Tube A. C. Superheterodyne
540 to 1,700 Kc.—2,100 to 7,000 Kc.
8 in. Colored Dial—A.V.C.

The Star-Line DX Five is a real 1936 model featuring the latest coil and condenser design—giving full coverage of the

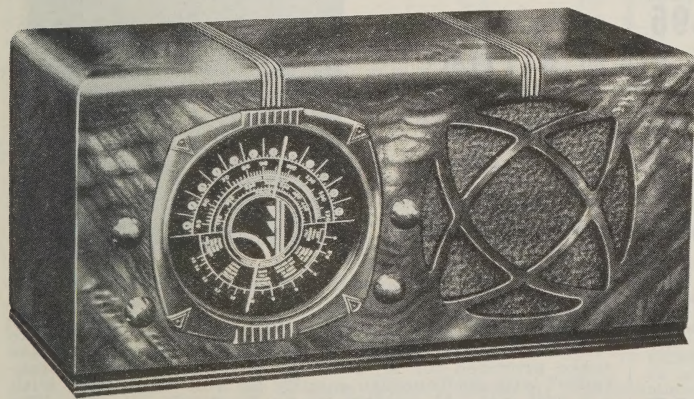
Broadcast Band
Both Police Bands
Amateurs—Aviation
and

The 6,000 to 7,000 Kc. S. W. Broadcast Band

The 6,000 to 7,000 Kc. band is one of the best bands for foreign reception. The Star-Line DX Five brings in English, German and other European stations, South American stations as well as the short wave stations of the U. S. very consistently in the heart of downtown Minneapolis with just a short inside aerial! Seven-tube performance through the use of dual purpose tubes: 6A7, 6D6, 75, 42 and 80. Three-gang condenser. Six-inch full dynamic speaker. Full A.V.C. circuit. The newest type of cabinet design—beautiful two-toned walnut.



STAR-LINE
DX FIVE
Model C110 **\$32.95**
LIST



STAR-LINE SEXTETTE

Model M169

\$45.00
LIST

"TRUE LIST"

STAR-LINE SEXTETTE

6 Tube A. C. Superheterodyne
1936 Style
"Lay-Down" Cabinet
3 Band All-Wave
8-inch Dial

Uses three metal tubes and three glass tubes as follows: 6A8G, 5Y3, 6F6G, 6K7 and 6Q7. Three-gang condenser. Two stages of I. F. Six-inch full dynamic speaker. Variable tone control. Full band coverage from 540 Kc. to 16,000 Kc. The cabinet is beautifully designed. It is the consensus of opinion in the radio trade that this type of cabinet is going to be very popular during 1936. Very smartly figured walnut used as shown. The Star-Line Sextette represents unusual value due, both to its appearance and to its performance. Real selectivity and sensitivity will be found on all bands and the tone is rich and full.



RADIOS FOR RURAL HOMES

NEW 1936

6 VOLT FARM SETS

These new 1936 model radios incorporate all of the very latest features that will be found on the best selling battery sets of the 1936 season. The cabinets are substantially built of the finest wood and have the most desirable styling. The performance of these sets is outstanding, both in sensitivity and selectivity, and the rich, brilliant tone will more than please you.

STAR-LINE 5 TUBE BATTERY SUPERHET

Less Than One Ampere Battery Drain

MODEL B5TB—Illustrated on right, incorporates these features: Automatic dial light, full eight-inch speaker, tone control, superhet circuit, Litz coils. Tubes used: 1A6, 34, 30, 32 and 33. Tunes broadcast and police bands. Cabinet is of finest walnut veneers. An outstanding value at this low price. A set you can build business with.

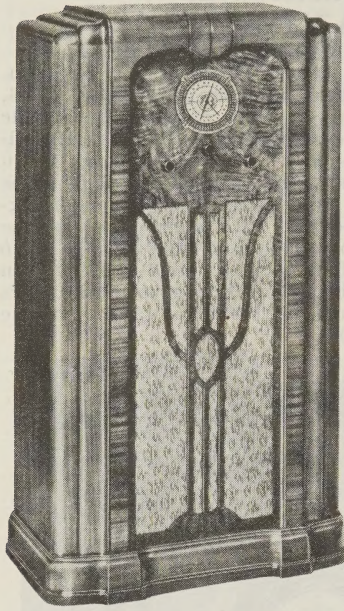
STAR-LINE 7 TUBE BATTERY SUPERHET

Plus 8-Inch Dynamic Speaker

MODEL B7TB—Exceptionally low drain of only 1½ amperes. Has same features as Model B5TB except has three-gang condenser, has a 34 tube as R. F. amp., and employs a 19 Class B output tube. The use of the 8-inch dynamic speaker gives you a tonal quality not before found in battery radios. Is housed in the same beautiful cabinet as the Model B5TB.

\$39.95
LIST

\$49.95
LIST



STAR-LINE 6 VOLT FARM SET Console Model

Illustrated above

7 TUBE SUPER—A. V. C. This extremely attractive and well built console houses the same chassis as is used in the Star-Line Model B7TB. This is one of the most attractive consoles that we have ever seen—due to the very fine quality of figured walnut that is used and to the pleasing design that is followed. The 7 tube superheterodyne chassis that is used is a real “knock-out” in performance and when housed in this beautiful console it gives you a complete unit that is a stand-out in dollar value.

MODEL B7TBC—List..... **\$69.50**

32 VOLT FARM SETS

No Batteries, Vibrators or Motor-Generators Used

STAR-LINE “532”

5 TUBE SUPERHET—LOW DRAIN—35 WATTS DRAIN

Here is a ruggedly built 5 tube superhet housed in an attractive walnut finish table model cabinet that gives unusual performance at an extremely low battery drain. Tubes used: 6A7, 6D6, 75, 38 and 6A6.

MODEL B532B—List..... **\$29.95**

STAR-LINE “932”

9 TUBE SUPERHET

The Star-Line “932” is a trouble-free, 32 volt superheterodyne radio that gives exceptionally good performance over the entire broadcast band. An 8-inch dynamic speaker is used resulting in an extremely pleasing tone. Other features are: tone control, full vision illuminated airplane dial and push-pull parallel audio. Tubes used: two 6D6, one 75, one 37, one 6A7 and four 43. The Model “932” is housed in the beautiful table model cabinet shown at the upper right side of this page.

MODEL B932B—Only 55 watts drain. **\$39.95**

List

STAR-LINE “932AW”

9 Tube All-Wave Superhet

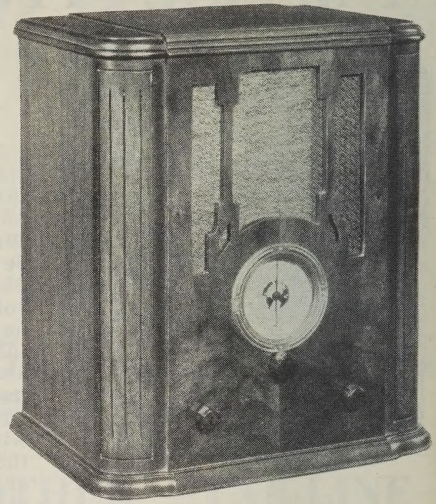
The Star-Line “932AW” is the same as our Model “932” except that it covers the entire frequency range from 550 to 17,000 Kc. Exceptionally good performance is obtained on all bands. Other features of the “932AW” are: Micro dual speed airplane dial, tone control, A. V. C. and push-pull parallel audio. This model is also housed in the cabinet shown at the top of the right side of this page. An 8-inch dynamic speaker is used.

MODEL B932AW—List..... **\$49.95**

CONSOLES

Model B932C is the chassis used in our Model B932B housed in the beautiful console shown above. List..... **\$59.50**
Model B932AWC is the same chassis that is used in our Model B932AW housed in the beautiful console shown above. List

\$69.50



STAR-LINE 4 TUBE 6 VOLT FARM SET

MODEL B4TB—A 4 tube 6 volt battery operated superheterodyne. Battery drain only 1.4 amperes. Full automatic volume control. Broadcast band coast to coast reception. In beautiful walnut finish cabinet (not illustrated). Airplane dial. A wonderful performing set at a rock-bottom price.

List

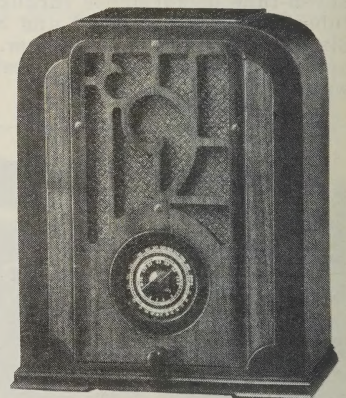
\$29.95

STAR-LINE

“Farmeradio”

2 VOLT BATTERY OPERATED FARM SET

CABINET HOLDS
ALL BATTERIES



The Star-Line “Farmeradio” is a four tube superheterodyne incorporating all of the latest features that give maximum performance. This wonderful little set operates to fullest efficiency on 90 volts of “B” batteries, one “C” battery and a dry “A” pack, and the cabinet has space provided for all of these batteries. The “Farmeradio” will also operate equally as well when used with a 2 volt wet “A” battery or an Eveready air cell. The cabinet is quite compact and is finished in an attractive two-tone walnut finish. One of the new “ortho” type magnetic speakers is used, giving a rich, full tone. You will be well pleased with the sensitivity and selectivity of the Star-Line “Farmeradio.”

Model B2VT. Less batteries. List..... **\$19.95**

“TRUE LIST”

GENUINE



MICRO-SENSITIVE RADIO TUBES

with

- QUICKER START
- QUIETER OPERATION
- UNIFORM PERFORMANCE
- UNIFORM VOLUME, and
- SEALED CARTON PROTECTION

Carry a 5-1 public preference over their nearest competitor—now priced to appeal to a price-conscious public. As distributors of R.C.A. Radio Tubes we are in a position to give recognized dealers and service men special quotations. Write for attractive discounts.

LIST PRICES

Effective April 1, 1935, orders for R.C.A. tubes will always be shipped at prevailing net prices. You can depend on our large stock for fast service with full assurance that your costs are the lowest offered by anyone.

Type	Volts	List Price	Type	Volts	List Price	Type	Volts	List Price
00A	5.0	\$1.25	42	6.3	\$0.99	85	6.3	\$0.99
01A	5.0	.59	43	25.0	.99	89	6.3	.99
1	6.3	1.25	45	2.5	.69	V99	3.3	.99
1-v	6.3	.89	46	2.5	.99	X99	3.3	.99
10	7.5	2.00	47	2.5	.89	1A6	2.0	1.25
11	1.1	1.25	48	30.0	2.50	2A3	2.5	1.25
12	1.1	1.25	49	2.0	.99	2A5	2.5	.99
112A	5.0	.69	50	7.5	2.50	2A6	2.5	.99
19	2.0	.99	53	2.5	1.25	2A7	2.5	1.25
20	3.3	.99	55	2.5	.99	6A4	6.3	1.25
22	3.3	1.25	56	2.5	.69	6A6	6.3	1.25
24A	2.5	.89	57	2.5	.89	6A7	6.3	1.25
26	1.5	.59	58	2.5	.89	1B5/25S	2.0	1.25
27	2.5	.69	59	2.5	1.25	2B7	2.5	1.25
30	2.0	.69	71A	5.0	.69	6B7	6.3	1.25
31	2.0	.69	75	6.3	.99	1C6	2.0	1.50
32	2.0	1.25	76	6.3	.69	6C6	6.3	.99
33	2.0	.99	77	6.3	.99	6D6	6.3	.89
34	2.0	1.25	78	6.3	.99	6E5	6.3	1.50
35	2.5	.89	79	6.3	1.25	6F7	6.3	1.50
36	6.3	.89	80	5.0	.59	5Z3	5.0	.89
37	6.3	.69	81	7.5	2.00	12Z3	12.6	.99
38	6.3	.89	82	2.5	.89	25Z5	25.0	.99
39-44	6.3	.89	83	5.0	.89	874		4.90
40	5.0	.69	83V	5.0	1.50	876		6.70
41	6.3	.89	84	6.3	1.25	886		6.75

R.C.A. ALL-METAL TUBES

6A8	6.3	\$1.75	6F6	6.3	\$1.50	6K7	6.3	\$1.50
6C5	6.3	1.25	6H6	6.3	1.25	6L7	6.3	1.75
6F5	6.3	1.25	6J7	6.3	1.60	5Z4	5.0	1.60
6Q7		2.00	25A6		1.75	25Z6		1.75

When You Think of Tubes
order from

LEW BONN CO.

The Complete Stock Radio Wholesaler

NORTHWEST'S LARGEST RADIO TUBE AND PARTS DISTRIBUTOR

"TRUE LIST"

R.C.A. DEALER SALES HELPS



No. 604—Tube Tester Stickers. Roll of 2,000, imprinted. \$1.00 net.

No. 694—R.C.A. Decal. Two-color marker for store windows. FREE.



No. 629—Illuminated Carton. Window or counter display. Height 12 in. Comes with 30-watt lamp and 6-ft. cord. \$1.00 net.

No. 665—Flange Sign. Four-color enamel job. Heavy metal. Individual hand lettered name on both sides of bottom panel. \$1.00 net.



No. 622—Illuminated Clock. Hammond motor, 20 in. diameter; lighted at night by two 30-watt lamps. \$5.00 net.

No. 472—Letterheads. Two colors. Imprinted. \$2.75 for 500; \$4.50 for 1,000 including envelopes. Net.



No. 318—Billheads. Imprinted. 500 for \$1.00 net.

No. 319—Service Order Pad. Imprinted. 50 sets of triplicate forms to a pad. 3 pads, \$1.25 net.



No. RC12—Tube Manual. 154 pages and 17x22 tube chart. Everyone needs this manual. 25c net.

No. 697—Price Tags.....Free
No. 669—Dummy Cartons.....Free
No. 684—Price Cards.....Free
No. 317—Not-at-Home Card. Net per 100.....\$0.25
No. 412—Package Tape Moistener. Net.....2.00
No. 623—10 rolls of package tape, imprinted. net 3.50
Write for information on other sales helps — coats, shirts, movie slides, log books, etc.

It always pays

THE QUALITY LINE

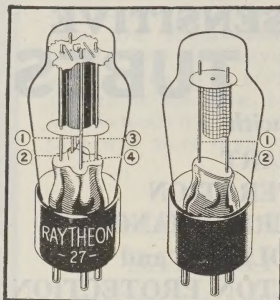
RAYTHEON
4 PILLAR

Radio's Highest Quality

Longest Life

Most Sturdily Constructed

RADIO TUBES



Raytheon's 4-Pillar construction is tried and proved. Jars and jolts that ruin all other makes of tubes do not affect Raytheon 4-Pillar radio tubes. Raytheon 4-Pillar tubes are used in a large majority of radio-equipped police cars and also are the favored tubes for use in airplane radios where tubes are subjected to heavy vibrations. Raytheon tubes are supplied as original equipment by more manufacturers of auto radios than any other make—because they have learned that Raytheon 4-Pillar construction means better performance and less trouble. You can prove, to all tube customers, that Raytheons are better than other tubes by demonstrating the added volume and the clarity of reception when installed in their radios. Then clinch the sale by pointing out the advantages of Raytheon's 4-Pillar construction.

A BETTER

Raytheon Radio Tubes are divided into three groups—Group 1, Group 2, Group 3. All Group 1 tubes are fast sellers and are guaranteed for six months. Group 2 tubes are medium fast sellers and are guaranteed for nine months. Group 3 tubes are the slowest sellers and are guaranteed for one year. You will find the group number of each tube listed right with each tube. Raytheon's guarantee includes everything but broken glass and burn-outs and this guarantee is backed 100% by the Lew Bonn Co. The guarantee period is de-

NEW LOW PRICES

Effective April 1st, 1935

Orders for Raytheon Tubes will always be shipped at prevailing net prices

Pentagrid Converter 1A6 Group 3 2.0 V. \$1.35	Detector Amp. 1B5/25S Group 3 2.0 V. \$1.35	Pentode Det. or Amp. 1C6 Group 3 2.0 V. \$1.60	Triode Power Amp. 2A3 Group 3 2.5 V. \$1.35	Triode Power Amp. 2A3H Group 3 2.5 V. \$1.35	Pentode Power Amp. 2A5 Group 2 2.5 V. \$1.10	Diode Det. Triode Amp. 2A6 Group 2 2.5 V. \$1.10	Pentagrid Converter 2A7 Group 2 2.5 V. \$1.35	Triple Twin Super Power Amp. 2B6 Group 3 2.5 V. \$2.50	Duplex Diode Pentode 2B7 Group 2 2.5 V. \$1.35	Full Wave Rectifier 5Z3 Group 3 5.0 V. \$1.00	Power Amp. 6A3 Group 3 6.3 V. \$1.35	Power Amp. Pentode 6A4 (1A) Group 2 6.3 V. \$1.35	Twin Class B Amp. 6A6 Group 3 6.3 V. \$1.35
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Pentagrid Converter 6A7 Group 2 6.3 V. \$1.35	Triodyne Power Output 6B5 Group 3 6.3 V. \$2.25	Duplex Diode Pentode 6B7 Group 3 6.3 V. \$1.35	Pentode Det. or Amp. 6C6 Group 3 6.3 V. \$1.10	Pentode R. F. Amp. 6D6 Group 3 6.3 V. \$1.00	Triode Pent. Det. or Osc. 6F7 Group 3 6.3 V. \$1.60	Full Wave Rectifier 6Z4 (84) Group 3 6.3 V. \$1.35	Pentode Power Amp. 12A5 Group 3 12 V. \$2.10	Power Amp. & Rectifier. 12A7 Group 3 12 V. \$2.20	Half Wave Rectifier 12Z3 Group 3 12 V. \$1.10	Voltage Doubling Rectifier 25Z5 Group 2 25 V. \$1.10	Triode Det. or Amp. 01A Group 1 5.0 V. \$0.65	Half Wave Rectifier 1V Group 3 6.3 V. \$1.00	Power Amp. Triode 10 Group 2 7.5 V. \$2.10
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Det. Amp. Triode 12A Group 3 5.0 V. \$0.75	Mixer OSC. 15 Group 3 2.0 V. \$2.00	Twin Class B Amp. 19 Group 3 2.0 V. \$1.10	R. F. Amp. Tetrode 22 Group 3 3.3 V. \$1.35	R. F. Amp. Tetrode 24A Group 1 2.5 V. \$1.00	Amp. Triode 26 Group 1 1.5 V. \$0.65	Det. Amp. Triode 27 Group 1 2.5 V. \$0.75	Det. Amp. Triode 30 Group 2 2.0 V. \$0.75	Power Amp. Triode 31 Group 3 2.0 V. \$0.75	R. F. Amp. Tetrode 32 Group 3 2.0 V. \$1.35	Power Amp. Pentode 33 Group 3 2.0 V. \$1.10	Super. Con. R. F. Pentode 34 Group 3 2.0 V. \$1.35
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Super. Con. R. F. Pentode 35/51 Group 1 2.5 V. \$1.00	R. F. Amp. Tetrode 36 Group 2 6.3 V. \$1.00	Det. Amp. Triode 37 Group 2 6.3 V. \$0.75	Power Amp. Pentode 38 Group 2 6.3 V. \$1.00	Super. Con. R. F. Pentode 39/44 Group 2 6.3 V. \$1.00	Power Amp. Pentode 41 Group 2 6.3 V. \$1.00	Power Amp. Pentode 42 Group 2 6.3 V. \$1.10	Power Amp. Pentode 43 Group 2 25 V. \$1.10	Power Amp. Triode 45 Group 1 2.5 V. \$0.75	Dual Grid Power Amp. 46 Group 3 2.5 V. \$1.10	Power Amp. Pentode 47 Group 1 2.5 V. \$1.00	Power Amp. Tetrode 48 Group 3 30 V. \$2.60
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"TRUE LIST"

HEON

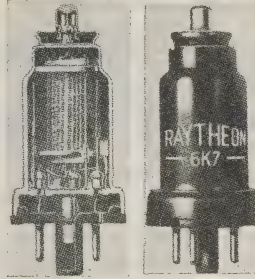
RADIO TUBES

to sell the best.

WITH BIG DEALER DISCOUNTS

GUARANTEE

terminated by the coding on the code label that is attached to each Raytheon Tube and is computed by adding six, nine or twelve months to the code date. The code date consists of two or three figures. The first, or first two, indicate the month of shipment and the last, year of shipment. For example, "74" would indicate shipment in July, 1934. The Lew Bonn Co. is the largest distributor of radio tubes in the Northwest so you are assured of a large, fresh stock of tubes at all times.



MORE PROFITS

A Cleaner Business

LESS TROUBLE

Read This!

The sale of radio tubes should constitute 40 to 50% of your sales volume. Therefore, you should be sure that the radio tube line that you are handling offers you the maximum profit with the least trouble. Raytheon radio tubes are nationally known and have very good consumer acceptance, together with the strongest sales feature possible—4-Pillar construction. Look over the many free sales helps we offer you. Look over the many items of test equipment that you can secure at great savings—see page 8 for full details.

5 IMPORTANT FEATURES!

1. A definite guarantee.
2. Raytheon quality is unexcelled.
3. Nationally advertised real consumer acceptance.
4. Complete selection—a tube for every set.
5. 4-Pillar construction. The only tube having this patented feature.

Dual Grid Power Amp.		
49	Group 3 2.0 V.	\$1.10
Power Amp. Triode		
50	Group 3 7.5 V.	\$2.60
Twin Class B Amp.		
53	Group 3 2.5 V.	\$1.35
Duplex Diode Triode		
55	Group 2 2.5 V.	\$1.10
Super Triode Amp. Det.		
56	Group 2 2.5 V.	\$0.75
Triple Grid Amp. Det.		
57	Group 2 2.5 V.	\$1.00
Triple Grid Super Con. Amp.		
58	Group 2 2.5 V.	\$1.00
Triple Grid Power Amp.		
59	Group 3 2.5 V.	\$1.35
Power Amp. Triode		
71A	Group 1 5.0 V.	\$0.75
Duplex Diode Hi Mu Triode		
75	Group 2 6.3 V.	\$1.10
Triode Det. Amp.		
76	Group 3 6.3 V.	\$0.75
Triple Grid Amp. Det.		
77	Group 3 6.3 V.	\$1.10
Triple Grid Super Con. Amp.		
78	Group 2 6.3 V.	\$1.10
Twin Class B. Amp.		
79	Group 3 6.3 V.	\$1.35
Full Wave Rectifier		
80	Group 1 5.0 V.	\$0.65

Half Wave Rectifier		
81	Group 3 7.5 V.	\$2.10
Full Wave Mer. Rectifier		
82	Group 3 2.5 V.	\$1.00
Full Wave Mer. Rectifier		
83	Group 3 5.0 V.	\$1.00
Full Wave Rectifier		
83V	Group 3 5.0 V.	\$1.60
Duplex Diode Triode		
85	Group 3 6.3 V.	\$1.10
Triple Grid Power Amp.		
89	Group 3 6.3 V.	\$1.10
Det. Amp. Triode		
X99	Group 3 3.3 V.	\$1.10
Amp. Triode		
864	Group 3 1.1 V.	\$3.00
Full Wave Gaseous Rect.		
BA	Group 3	\$7.50
Full Wave Gaseous Rect.		
BH	Group 3	\$4.65
Half Wave Gaseous Rect.		
BR	Group 3	\$2.75
RAYTHEON SHIELDED TUBES (Majestic Radio Sets) ALL GROUP 3		
24-S		\$1.30
27-S		.80
35S/51S		1.40
55S		1.70

56S	.....	\$1.30
57S	.....	1.75
57A-S	...	1.75
58S	.....	1.75
58A-S	...	1.75
85S	.....	1.70
2A7S	...	2.30
6A7S	...	2.30
6B7S	...	2.10
6F7S	...	1.90
6C7	.....	1.90
6D7	.....	1.75
6E7	.....	1.75
6Y5	.....	1.90
2S/4S	...	2.65
2Z2/G84	..	1.85
6Z5/12Z5	.	1.90
46A1	Ballast	1.10
46B1	Ballast	1.10



All-Metal Tubes

5Z4	.....	\$1.60
6A8	.....	1.75
6C5	.....	1.25
6F5	.....	1.25
6F6	.....	1.50
6H6	.....	1.25
6J7	.....	1.60
6K7	.....	1.50
6L7	.....	1.75
6Q7	.....	2.00
25A6	.....	1.75
25Z6	.....	1.75

**See Page 2
for Discounts**

"TRUE LIST"



GENUINE
SPARTON
RADIO TUBES
NEW LOW PRICES

*There Is a Big Market for
Sparton Tubes*

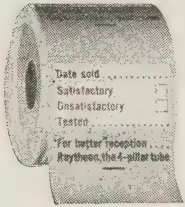
Don't overlook this profit-making
line. Always use Sparton Tubes in
Sparton Radios—for Sparton Tone.

Prices Effective Nov. 1st, 1935

Type	Description	Fil. or Heater Volts	List Price
25-S	Duplex Diode Triode	2.0	\$2.70
70	Duo Control Triode	6.3	1.90
181	Power Amp.	3.0	1.90
401	Amp.-Det.	3.0	1.90
482-A	D. C. Power Amp.	5.0	2.60
484-A	D. C. Amp.-Det.	3.0	2.60
486	D. C. R. F. Amp.	3.0	4.10

These three tubes below are the real fast sellers and
should be carried in stock by all good dealers and
service men.

Type	Description	Fil. or Heater Volts	List Price
482-B	Power Amp.	3.0	\$1.65
483	Power Amp.	3.0	1.65
485	Amp.-Det.	3.0	1.45



**SALES
HELPS**

FREE TUBE TEST STICKERS
100 in a roll. Space provided for date
sold, date re-tested. (Not imprinted.)

**IMPRINTED
TUBE TEST
STICKERS**

Available in rolls of 1,000 at \$1.00 net.
On this item and any other form of im-
printed advertising, remember that the
order has to go to the factory and it
takes nearly one month for completion
of order.



**TUBE TECHNICAL
DATA CARD**

Seventh Edition.
Complete technical infor-
mation on all receiving
tubes **FREE**.

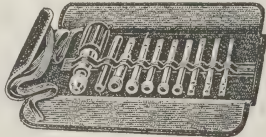


TUBE TALKS

48 pages, full of sales
ideas, service tips and a
complete list of tube lay-
outs in over 2,000 radio
sets. \$0.50 net or free
with order for 25 tubes.

**COVERALL
COAT**

Washable tan linen—give your
size when ordering. Cash \$3.00
net or free with contract for
60 Raytheon tubes. Deposit
\$3.00, which will be returned
upon completion of contract.



NEW SPINTITE TOOL KIT
11 pieces. Deposit \$4.95 and con-
tract to buy 99 Raytheon tubes
within 4 months. Initial order 33
tubes. Money refunded as mer-
chandise credit upon completion of
contract or \$4.95 cash, net.

SUEDE BAG

Zipper type, size 18 inches long, 10
inches high, 8 inches wide. Con-
tract to buy 39 Raytheon tubes
within 3 months—deposit \$1.95.
Initial order, 19 tubes. Deposit re-
turned as merchandise credit upon
completion of contract or \$1.95
cash, net.

All Sales Helps and Tube
Deals shown at your net
costs.

**TUNGAR BULBS
G. E.**

New and Old Style

New Style All Contacts Are in the Base

No. 277465—2 Amp. New Type..	\$4.00
No. 189049—5 Amp. Old Type with Top Connector	8.00
No. 289881—0.6 Amp. for Trickle Charger	4.00
No. 195528—2 Amp. Old Type...	4.00



Old Style
2 Amp.

NATIONAL UNION RECTIFIERS

New and Better! Will replace any standard
rectifier in all battery charger units. Thoroughly
guaranteed. Standard construction.

2 Amp. Rectifier Bulb No. Nu-2.....	\$4.00
6 Amp. Rectifier Bulb No. Nu-6.....	8.00



GENUINE KELLOGG TUBES

No. 401—Top Heater Connections, 3.0 V. Det. Amp.....	\$4.00
No. 403—Top Heater Connections, 3.0 V. Power Amp.....	4.50

RAYTHEON

**TUBE
DEALS**

Earn the Test Equipment through the New Simplified Ray-
theon Plan. The dealer agrees to buy, under contract, a given
number of tubes within a given period of months, including
an initial order with the balance in equal quantities during
the consecutive months of the contract period. The contract
calls for the rental of the equipment for which a deposit is
made, part in cash and part in a (non-interest bearing) note.
Upon completion of the contract, the note is cancelled and a
merchandise credit for the amount of the cash deposit is
issued to the dealer together with a certificate of ownership.
All of the equipment comes direct from the factory.

Equipment	Tubes	Total Initial Order	Deposit	Tubes Per Month	Value
Gherardl "Modern Radio Servicing".....	100	24	\$ 5.00	11 for 6 mo.	\$ 5.00
Supreme 89D	918	68	35.50	37 for 23 mo.	45.95
Triplet 1210A	400	32	14.00	16 for 23 mo.	20.00
Solar Capacity Analyzer.347	25	25	13.35	14 for 23 mo.	17.35
Federal Condenser Analyzer	210	45	6.80	15 for 11 mo.	10.50
Clough Brengle O. M. Signal Gen. and Oscilloscope....	2,347	70	80.50	99 for 23 mo.	117.35
Oscilloscope only	1,390	56	48.20	58 for 23 mo.	69.50
Triplet Complete 4 Unit Master Tester	1,434	54	49.65	60 for 23 mo.	71.70
Supreme 339D	799	40	31.00	33 for 23 mo.	39.95
Triplet 1230 Oscillator 306	36	34	10.85	16 for 17 mo.	15.30
Supreme Oscillator	739	49	28.75	30 for 23 mo.	36.95
Clough Brengle O. C. Oscillator	598	60	23.25	26 for 23 mo.	32.90
Radio City Multitester	279	26	9.20	11 for 23 mo.	13.95
Triplet 1200 and 1220A	588	36	21.25	24 for 23 mo.	29.40

Write to Lew Bonn Co. for Raytheon's Big Book on Tube
Deals. Why not use the BEST tubes if you are interested in
a tube deal? Remember this—Raytheon **does not** make tubes
for chain stores. 4-pillar tubes are never "gypped."

IMPORTANT NOTICE!

Effective January 1, 1936, **Rider's Manuals** have been
withdrawn from all tube manufacturers for use in
"Tube Deals." Inasmuch as these manuals can no
longer be secured on "tube deals" from anyone, we
ask you to remember that the Lew Bonn Co. carries
all of the **Rider's Manuals** and **books** in stock **all the
time**.

If you sell large quantities of radio tubes, we would
appreciate the opportunity of quoting our quantity
prices to you. You can get maximum discounts and
"day's quicker service" from the Lew Bonn Co.'s tube
stock. The largest stock of tubes in the Northwest.

EVEREADY

RADIO BATTERIES

EVEREADY



Each new Eveready "B" and "C" battery is equipped with a 3-hole socket and a removable plug. Wires from the set connect to the plug. Put the plug in the battery socket—as easy as putting in a radio tube—and the correct connections are all made. Fool-proof! No wiring troubles! Can be used on old radios as well as new. The batteries marked * have this wonderful new feature.



Cat. No.	Volts and Type	Unit Package Quantity	Weight Each Battery	List Price
485*	45-volt, Medium Layerbilt.....	6	11 lbs.	\$1.89
486*	45-volt, Heavy Duty Layerbilt.....	6	16 lbs.	2.39
572*	45-volt, Medium, Round Cell.....	6	9 1/2 lbs.	1.29
570*	45-volt, Heavy Duty, Round Cell....	6	14 lbs.	1.79
762	45-volt, Portable, Upright.....	5	4 lbs.	1.35

"B" BATTERIES

"C" BATTERIES

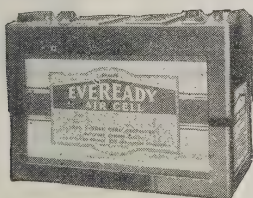
768*	22 1/2-volt—5 Taps.....	5	1 3/8 lbs.	.85
771*	4 1/2-volt—4 Taps.....	5	1 lb.	.35
763	22 1/2-volt—2 Taps, Small.....	5	1 1/8 lbs.	.75
781	4 1/2-volt—Small, for Analyzers.....	5	3/4 lb.	.40
773	7 1/2-volt—6 Taps.....	5	3/4 lb.	.65
783	15-volt—Special.....	5	1 1/8 lbs.	1.25

"A" BATTERIES

7111	1 1/2-volt "A" Dry Cell.....	25	2 1/2 lbs.	.40
X-124	3-volt Dry "A" Battery Pack.....	1	42 lbs.	7.50
X-125	3-volt Dry "A" Battery Pack.....	1	18 lbs.	4.00

FLASHLIGHT CELLS

No. 1	Small Size.....	36		.13
No. 2	Standard Size.....	36		.13



EVEREADY

AIR CELL "A" BATTERY

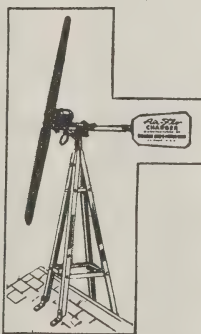
No. A600—The famous Eveready "1,000-hour" "A" battery, with improvements, now reduced to.....List price \$5.95
No. SA850—A new super heavy duty Air Cell for sets drawing more than 650 milliamperes and less than 750 milliamperes, use the SA850. List price \$7.50

Prices Shown on Eveready Batteries Were Effective Beginning December 16, 1935

If you find lower prices in another catalog, it is because that catalog was completed before that date. There was a slight increase in prices on October 14. Play safe and send your orders for batteries to Lew Bonn Co. at these prices—no chance of a delay in your order due to wrong prices.

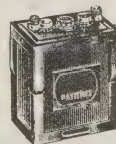
PIONEER AIR-FLO CHARGER

Charges Batteries at No Cost
A complete wind-driven generator.



proofed. Operates at extremely low wind velocity. Can be mounted on barn or house roof by the tower unit with which it is illustrated.
Generator complete with ammeter, cut-out relay, pipe fittings, clamps, battery clips and 50 feet of No. 12 insulated copper wire. Complete instructions for operation and installation. With steel mounting tower.....List price \$24.95

Supplies 6 volts at 5 amperes direct current to charge 6-volt storage batteries. An automatic cut-out device on generator prevents overcharging and provides protection from excessive wind velocity. Scientifically curved propeller gives maximum r.p.m. at any wind velocity. Propeller is constructed of especially treated, oil impregnated, carefully selected, metal sheathed wood. Entire assembly is completely weather-proofed.



SECURITY RADIO STORAGE BATTERIES

Heavy duty radio type. 1/4-inch thick plates insure high capacities.

Cat. No.	Volts	Rating at 1/2 Ampere Discharge, Amperes	Weight, Lbs.	List Price
B2180	2	180	21	\$ 3.95
B2246	2	246	24	5.95
B6112	6	112	41	6.95
B6135	6	135	46	8.50
B6160	6	160	60	9.95
B6181	6	181	66	10.95
B6203	6	203	72	12.80

For the 6-volt "B-less" radios, we recommend the higher capacity batteries for economical operation.



CORNELL

The Quality Condenser Line

Cornell Dubilier Corp. is the oldest and largest organization devoted exclusively to the development and manufacture of electrical condensers. Cornell Dubilier Condensers are precision built, of the finest quality and are designed to give the highest possible standard of service. All Cornell Dubilier

Condensers are built well within the limits of R. M. A. safety requirements and are fully guaranteed. Lew Bonn is proud to be the exclusive distributor of radio's best condenser line—Cornell Dubilier.
FOR SAFETY'S SAKE—Always Use C-D Condensers

ELECTROLYTIC CONDENSERS

"525" HANDI-MIKES, CARD-BOARD CASED DRY ELECTROLYTICS

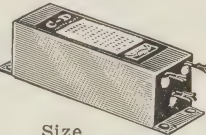
An excellent condenser for general replacement purposes. Compact sizes. Moisture proof. Low prices.

525 V. Peak—
Work. V. 450 DC

Cat. No.	Cap. MFD	L. In.	W. In.	D. In.	List
RHM9010	1	2 1/2	1 1/2	1 1/2	\$0.66
RHM9020	2	2 1/2	1 1/2	1 1/2	.78
RHM9040	4	2 1/2	1 1/2	1 1/2	.90
RHM9080	8	2 1/2	1 1/2	1 1/2	1.14
EE9120	12	4 3/8	1 1/2	1 1/2	1.56
EE9160	16	4 3/8	1 1/2	1 1/2	1.74

HI-VOLTAGE MULTIPLE SECTION UNITS CARD-BOARD CASED DRY ELECTROLYTICS

525 Peak Volts;
450 DC Working
Volts



Cat. No.	Cap. MFD	L. In.	W. In.	D. In.	List
EH9404SL	4-4	4 3/8	1 1/2	1 1/2	\$1.44
EH9408SL	4-8	4 3/8	1 1/2	1 1/2	1.62
EH9808SL	8-8	4 3/8	1 1/2	1 1/2	1.80
EH9888	8-8-8	4 3/8	2	2	2.64

"600" HANDI-MIKES



Kit of ten 600-volt, compact size, dry electrolytics

\$13.44

"600" Handi-Mikes; Maximum Surge Volts, 600; DC Working Volts 475

Cat. No.	Cap. MFD	L. In.	W. In.	D. In.	List
HM11010	1	2 1/2	1 1/2	1 1/2	\$1.02
HM11020	2	2 1/2	1 1/2	1 1/2	1.14
HM11040	4	2 1/2	1 1/2	1 1/2	1.38
HM11060	6	2 1/2	1 1/2	1 1/2	1.56
HM11080	8	2 1/2	1 1/2	1 1/2	1.62

"300" JUNIOR HANDI-MIKES

DC Working Volts, 250; Maximum Surge Volts, 300

Cat. No.	Cap. MFD	L. In.	W. In.	D. In.	List
JHM3004	4	2 1/2 x 1 1/2	3/8	5/8	\$0.78
JHM3008	8	2 1/2 x 1 1/2	3/8	5/8	1.02
JHM3010	10	2 1/2 x 1 1/2	3/8	5/8	1.14
JHM3012	12	2 1/2 x 1 1/2	3/8	5/8	1.26

LOW VOLTAGE DRY ELECTROLYTICS



Junior kit of "300" Handi-Mikes. Contains ten 300-volt Handi-Mikes and two 35-volt Handi-Mikes.

\$9.48

LOW-VOLTAGE HIGH CAPACITY DRY ELECTROLYTICS, TUBULAR CONTAINERS

Strong Wire Leads.

Hermetically Sealed.

Used in all AC-DC sets and also used for by-pass in audio circuits. You should stock an assortment of these condensers.

DC Working Volts, 450; Maximum Surge Volts, 525

Cat. No.	Cap. MFD	Size	List
ED9010	1	2 3/8 x 1/2 in.	\$0.66
ED9020	2	2 3/8 x 1/2 in.	.78
ED9040	4	2 3/8 x 1/2 in.	.90

DC Working Volts, 300; Maximum Surge Volts, 350

Cat. No.	Cap. MFD	Size	List
ED8020	2	2 3/8 x 3/8 in.	.72
ED8040	4	2 3/8 x 3/8 in.	.84

DC Working Volts, 250; Maximum Surge Volts, 300

Cat. No.	Cap. MFD	Size	List
ED3004	4	2 3/8 x 5/8 in.	.78
ED3008	8	2 3/8 x 5/8 in.	1.02
ED3010	10	2 3/8 x 1 in.	1.14
ED3012	12	2 3/8 x 1 in.	1.26

DC Working Volts, 200; Maximum Surge Volts, 250

Cat. No.	Cap. MFD	Size	List
ED7020	2	2 3/8 x 3/4 in.	.66
ED7040	4	2 3/8 x 1 in.	.78
ED7080	8	2 3/8 x 1 1/2 in.	.96

DC Working Volts, 150; Maximum Surge Volts, 200

Cat. No.	Cap. MFD	Size	List
ED6040	4	2 3/8 x 1 in.	.72
ED6040	8	2 3/8 x 1 1/2 in.	.90

DC Working Volts, 100; Maximum Surge Volts, 150

Cat. No.	Cap. MFD	Size	List
ED5050	5	2 3/8 x 3/4 in.	.66
ED5100	10	2 3/8 x 1 in.	.84
ED5250	25	2 3/8 x 1 1/4 in.	1.14

DC Working Volts, 50; Maximum Surge Volts, 75

Cat. No.	Cap. MFD	Size	List
ED3050	5	2 3/8 x 3/4 in.	.60
ED3100	10	2 3/8 x 3/4 in.	.78
ED3250	25	2 3/8 x 1 1/4 in.	.96

DC Working Volts, 25; Maximum Surge Volts, 35

Cat. No.	Cap. MFD	Size	List
ED2055	Dual 5	2 3/8 x 3/4 in.	.90
ED2101	Dual 10	2 3/8 x 1 in.	.90

"D-N LIST"

"HI MIKE" ROUND METAL CAN DRY ELECTROLYTICS

Inverted Can Negative

525 Peak Volts; 450 DC Working Volts

Cat. No.	Cap. MFD	Size	List
EP9040	4	3 3/8 x 1 in.	\$1.02
EP9081	8	3 3/8 x 1 in.	1.26



UPRIGHT CAN NEGATIVE

525 Peak Volts; 450 DC Working Volts

Cat. No.	Cap. MFD	Size	List
EA9040	4	2 1/2 x 1 3/8 in.	\$1.02
EA9080	8	4 3/8 x 1 1/2 in.	1.26
EA9120	12	4 3/8 x 1 1/2 in.	1.68



MULTIPLE SECTIONS

525 Peak Volts; 450 DC Working Volts Inverted

Cat. No.	Cap. MFD	Size	List
EB4400	4-4	4 3/8 x 1 3/8 in.	\$1.56
EB4800	4-8	4 3/8 x 1 1/2 in.	1.74
EB8800	8-8	4 3/8 x 1 1/2 in.	1.92

Above three condensers have four leads; no common lead.



MULTIPLE SECTION CAN COMMON NEGATIVE UPRIGHT MOUNTING

525 Peak Volts; 450 DC Working Volts

Cat. No.	Cap. MFD	Size	List
EA4440	4-4-4	4 3/8 x 2 1/2 in.	\$2.58
EA8801	8-8	4 3/8 x 2 1/2 in.	2.16
EA8160	8-16	4 3/8 x 2 1/2 in.	2.82
EA8880	8-8-8	4 3/8 x 3 in.	3.24
EA9918	9-9-18	4 3/8 x 3 in.	4.50
EA8888	8-8-8-8	4 3/8 x 3 in.	4.32
EA9911	9-9-18-18	4 3/8 x 3 1/2 in.	6.30



HI-CAPACITY—LOW VOLTAGE ELECTROLYTICS IN SQUARE METAL CANS

Working Voltage, 12 Volts D. C.

Cat. No.	Cap. MFD	Size	List
EVL1210	1000	4 1/4 x 2 x 1 3/8	\$4.28
EVL1220	2000	6 1/4 x 2 1/4 x 2 1/4	7.58

Working Voltage, 18 Volts D. C.

Cat. No.	Cap. MFD	Size	List
EVL1810	1000	4 1/4 x 2 x 2 1/4	\$5.10
EVL1820	2000	6 1/4 x 3 x 3	11.00
EVL1830	3000	6 1/4 x 3 x 3	15.88

Working Voltage, 25 Volts D. C.

Cat. No.	Cap. MFD	Size	List
EVL2510	1000	6 1/4 x 2 1/4 x 2 1/4	\$7.88
EVL2520	2000	6 1/4 x 3 x 3	14.92

Working Voltage, 30 Volts D. C.

Cat. No.	Cap. MFD	Size	List
EVL3010	1000	6 1/4 x 2 1/4 x 2 1/4	\$9.32
EVL3020	2000	6 1/4 x 3 x 3	17.72
EVL3030	3000	6 1/4 x 4 x 4	26.12

DUBILIER

Leaders Since 1910



NOTICE NEW LOW PRICES!

Paper Condensers—Cased and Uncased

BY-PASS TYPES



D. C. Test V. 800—Peak V. 600—D. C. Work V. 400

Cat. No.	Cap. Mfd.	Can Dimensions			Price
		L	W	H	
DA-4005.....	.05	1 13/16"	1"	3/4"	\$0.54
DA-4011.....	.1	1 13/16"	1"	1/2"	.60
DA-4025.....	.25	1 13/16"	1"	3/4"	.72
DA-4050.....	.5	1 13/16"	1"	7/8"	.90
DA-4100.....	1.0	2"	1 3/4"	13/16"	1.20
DA-4200.....	2.0	2"	2"	1 1/8"	1.86

D. C. Test V. 1200—Peak V. 800—D. C. Work V. 600

Cat. No.	Cap. Mfd.	Can Dimensions			Price
		L	W	H	
DA-6011.....	.1	1 13/16"	1"	1/2"	\$0.72
DA-6025.....	.25	1 13/16"	1 1/4"	3/4"	.84
DA-6050.....	.5	2"	1 3/4"	13/16"	1.14
DA-6100.....	1.0	2"	2"	1 1/8"	1.80

MULTIPLE SECTIONS

D. C. Test V. 800—Peak V. 600—D. C. Work V. 400

Cat. No.	Cap. Mfd.	Can Dimensions			Price
		L	W	H	
DB-4010.....	1-1	1 13/16"	1"	3/4"	\$0.78
DB-4025.....	25-25	2"	1 1/4"	3/4"	.96
DB-4050.....	5-5	2"	1 3/4"	3/4"	.84
DC-4010.....	1-1-1	1 13/16"	1"	3/4"	1.02
DC-4025.....	25-25-25	2"	1 3/4"	13/16"	1.26
DC-4050.....	1-1-1-1	2"	1 3/4"	13/16"	1.32



UNCASED RENEWAL PAPER CONDENSERS

Working Voltage 400 V. D. C.—Equipped with Black Wire leads

Cat. No.	Cap. Mfd.	Size L x W x D			List Price
		L	W	D	
RM-4010.....	.1	2	x 3/4	3/16	\$0.48
RM-4025.....	.25	2	x 1	x 1/4	.54
RM-4050.....	.5	2	x 1	x 1/2	.66
RM-4100.....	1	2	x 1 3/8	11/16	.90
RM-4200.....	2	2	x 1 7/8	1 1/8	1.38
RM-4201.....	2	3	3/8x1 7/8	5/8	1.38
RM-4400.....	4	3	3/8x1 7/8	1 1/8	2.50

Working Voltage 600 V. D. C.—Equipped with Red wire leads

Cat. No.	Cap. Mfd.	Size L x W x D			List Price
		L	W	D	
RM-6010.....	.1	2	x 1	x 3/16	.54
RM-6025.....	.25	2	x 1	x 3/8	.78
RM-6050.....	.5	2	x 1 3/8	1/2	.78
RM-6100.....	1	2	x 1 7/8	3/4	1.20
RM-6200.....	2	3	3/8x1 7/8	7/8	1.68
RM-6400.....	4	4	1/4x1 7/8	3/8	3.10

Working Voltage 800 V. D. C.—Equipped with Green wire leads

Cat. No.	Cap. Mfd.	Size L x W x D			List Price
		L	W	D	
RM-8010.....	.1	2	x 1	x 7/16	.60
RM-8025.....	.25	2	x 1 3/8	5/8	.78
RM-8050.....	.5	2	x 1 7/8	7/8	1.00
RM-8100.....	1	3	3/8x1 7/8	7/8	1.50
RM-8200.....	2	4	1/4x1 7/8	3/8	2.60

Working Voltage 1000 V. D. C.—Equipped with Blue wire leads

Cat. No.	Cap. Mfd.	Size L x W x D			List Price
		L	W	D	
RM-10010.....	.1	2	x 1 3/8	7/16	.70
RM-10025.....	.25	2	x 1 7/8	5/8	.90
RM-10050.....	.5	3	3/8x1 7/8	5/8	1.20
RM-10100.....	1	4	1/4x1 7/8	7/8	1.80
RM-10200.....	2	4	1/4x1 7/8	3/4	3.00



TUBULARS

With Heavy Tinned Wire Leads

D. C. Test V. 1200—Peak V. 800—D. C. Work V. 600

Cat. No.	Cap. Mfd.	Diameter	L	Price
DT-6T1.....	.0001	.440"	1 3/16"	\$0.24
DT-6T25.....	.00025	.440"	1 3/16"	.24
DT-6T5.....	.0005	.440"	1 3/16"	.24
DT-6D1.....	.001	.440"	1 3/16"	.24
DT-6D2.....	.002	.440"	1 3/16"	.24
DT-6D4.....	.004	.440"	1 3/16"	.24
DT-6D5.....	.005	.440"	1 3/16"	.24
DT-6D6.....	.006	.440"	1 3/16"	.24
DT-6S1.....	.01	.440"	1 3/16"	.24
DT-6S2.....	.02	.440"	1 3/16"	.30
DT-6S5.....	.05	.578"	1 7/16"	.36
DT-6P1.....	.1	.688"	2"	.42
DT-6P25.....	.25	.813"	2"	.54
DT-6P5.....	.5	1.	2"	.72

D. C. Test V. 800—Peak V. 600—D. C. Work V. 400

Cat. No.	Cap. Mfd.	Diameter	L	Price
DT-4S1.....	.01	.440"	1 3/16"	.24
DT-4S2.....	.02	.440"	1 3/16"	.24
DT-4S5.....	.05	.440"	1 7/16"	.30
DT-4P1.....	.1	.578"	1 7/16"	.36
DT-4P25.....	.25	.688"	1 15/16"	.54
DT-4P5.....	.5	.813"	2 1/4"	.60
DT-4W1.....	1.0	1.189"	2 1/4"	.90

MULTIPLE SECTIONS

D. C. Test V. 800—Peak V. 600—D. C. Work V. 400

Cat. No.	Cap. Mfd.	Diameter	L	Price
BC-4S1.....	.01-.01	.500"	1 11/16"	.48
BC-4S5.....	.05-.05	.775"	2 1/4"	.60
BC-4P1.....	1-1	.775"	2 1/4"	.66
BC-4P25.....	25-25	.975"	2 1/4"	1.02

ELECTROLYTIC TYPE PAPER CONDENSERS

Same sizes and appearance as electrolytic condensers. No polarity—no leakage. Long wire leads—dual sections—separate leads—no commons. Capacity ratings are given in the values of electrolytic condensers they will replace—not the actual capacities of these condensers.

CARDBOARD CONTAINERS

450 V. D. C. Work. Volt—600 V. D. C. Peak

Cat. No.	Cap. Mfd.	Size			List Price
		L	W	D	
PE-C4002.....	2	4 1/8"	1 3/8"	11/16"	\$0.90
PE-C4004.....	4	4 1/8"	1 3/8"	11/16"	1.08
PE-C4008.....	8	4 1/8"	1 3/8"	15/16"	1.38
PE-C4004.....	4-4	4 3/8"	1 1/2"	1 1/8"	1.80
PE-C4408.....	8-8	4 3/8"	1 1/2"	1 1/2"	2.28

600 V. D. C. Work. Volt—800 V. D. C. Peak

Cat. No.	Cap. Mfd.	Size			List Price
		L	W	D	
PE-C6002.....	2	4 1/8"	1 3/8"	15/16"	1.20
PE-C6004.....	4	4 1/8"	1 3/8"	15/16"	1.44
PE-C6008.....	8	4 3/8"	1 1/2"	1 1/8"	1.92
PE-C6404.....	4-4	4 3/8"	1 1/2"	1 1/2"	2.40
PE-C6808.....	8-8	4 3/8"	1 1/2"	1 1/2"	3.18

ROUND METAL CONTAINER

600 V. D. C. Work. Volt—800 V. D. C. Peak

Cat. No.	Cap. Mfd.	Size			List Price
		L	W	D	
PE-B6004.....	4	2 1/2"x1	3/8"	1/2"	1.62
PE-B6008.....	8	4 3/8"x1	3/8"	1/2"	2.10
PE-B6404.....	4-4	4 3/8"x1	3/8"	1/2"	2.70
PE-B6808.....	8-8	4 3/8"x1	1/2"	1/2"	3.36



Extra!

Buy ten assorted C-D Paper Condensers in one order and you may deduct 10% from the net prices. This offer is good until further notice but applies to Paper Condensers only—not Electrolytics.

CORNELL-DUBILIER ABSOLUTE DUPLICATE PAPER CONDENSERS

ATWATER KENT



AK-201—For Model 37, By-pass No. 9494 3X.25...\$2.00

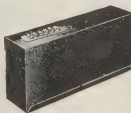
AK-204—For AK 37-38 condenser bank including filter and speaker chokes...\$5.40



AK-202—For AK-37, speaker filter condenser No. 9575, cap. .25 MFD.....\$0.80

AK-203—For AK-84Q, capacity .1x.25 MFD\$1.00

MAJESTIC



NOTE!
NEW LOW PRICES.
Don't buy job lot junk when you can get genuine Dubilier's at these low prices.
MC101 (PL1309) — For 7BP6—10. MFD. \$ 5.40
MFD.

MC102—For 7P6 9. 5.40
MC103 (PL1765)—For 8P6.. 9. 10.80
MC104 (PL1766)—For 9P6.. 7. 5.40

SPARTAN

No. A5032—1. MFD., 200 V...\$1.10
No. A5033—.25 MFD., 500 V.. 1.00



Be Safe—On Every Job
Use
Cornell-Dubilier Condensers!

"D-N LIST"



CORNELL-DUBILIER CONDENSERS



For the Best Results in Any Radio Circuit

ABSOLUTE DUPLICATE ELECTROLYTICS

CB—Cardboard Container

MC—Metal Container

Original Part No.	C - D Part No.	Capacity and Working Volts	Style	Dimensions	List Price	Original Part No.	C - D Part No.	Capacity and Working Volts	Style	Dimensions	List Price
Atwater Kent						International					
26092	MA10515	8-8/300	Mc	2½x2¼x1½	\$2.00	A-427	MA10627	3-3/100; 3/15	Cb	2½x1¼x1½	\$1.45
24602-1	10196	8-8-8/150	Cb	3¼x1½x1¼	2.10	A-430	PL 5856	4-10-10/150	Cb	3½x1¼x1	2.00
(also 24955)	10328	8-8-8/150; 10/25	Cb	3¼x1½x1¼	2.10	A-424					
Colonial						A-408	11087	5-5/25	Cb	1½x ¾x ½	.90
R8053	10283	8-8-8/200	Cb	2½x2¼x1½	2.70	A-407	10755	4-4/175	Cb	3 x1 x ¾	1.10
R8249	10284	8/200; 8/300	Cb	3¼x1½x1¼	2.00		10043	5-5/35	Cb	2½x ¾x ¾	.85
8313	10306	4/150; 8/200	Cb	2½x2¼x1½	1.50		10300	4-12-7/150	Cb	4 x1¼x1	2.15
8357	10347	8/150; 20/20	Cb	2½x1½x1¼	1.50		11119	8-8/200	Mc	1½x3½	1.60
8389	10366	8/150; 20/20	Cb	2½x1½x1¼	1.50		11191	8-30/100	Cb	3½x1¾x ¾	1.85
8431	10305	8-8/150	Cb	2½x1½x1½	1.70		11316	3-3/100; 5/25	Cb	2½x1¼x ¾	1.20
8748	10432	8/200	Cb	2½x1	.95		11702	8/400; 6-6/300	Mc	4½x1¾	2.80
8749	10433	8/300	Cb	3 x2 x ¾	1.10	17-4786	11519	12/25	Mc	¾x ¾	.65
8780	10481	8/300; 8/150	Cb	2½x2½x2	1.70	Arvin					
8952	10482	8-8-8/200	Cb	2½x2½x1½	2.70	17-4707	11406	12-12/25	Cb	¾x3¾	.90
9150	10532	8-8-8/200	Cb	4 x2½x1½	2.75	17-4710	11414	4/350	Cb	¾x4¾	.90
9181	10687	16/150	Cb	3¼x1	1.20	RCA Victor					
9237	10624	4/300	Cb	2½x1	.90	M66122-2	MA10711	4-4/250	Cb	2½x1½x1½	1.15
9780	11071	8-8/300; 10/25	Mc	4½x1 x1½	2.50	M66140	10101	5-5/25	Cb	2½x ¾	.90
L 445	10208	8/200	Cb	3½x1¾x ½	.90	(3536)					
L 617	10430	8/200	Cb	3¼x1½x1¼	.90	M66140-5	10102	4-4/150	Cb	3 x ¾	1.00
R8515	10342	4/150; 8/200	Cb	2½x1¾x1¾	1.50	(3538)					
R10673	11434	6-6/150; 25/25	Cb	2 x2½x1½	1.80	M66143-1	10621	4/150; 4/450	Cb	3½x1½x1	1.10
R11909	11452	4/350; 12/25	Mc	4½x1¾x1	1.30	M66155	11747	4-4/300; 10/150;			
R 8247	10293	8/200; 8/250	Cb	3¼x1¾x1¼	1.85	(6487) (R37)	4/25		Cb	3½x1½x1½	2.40
Crosley						M66143-3	10693	4/150; 4/450	Cb	3½x1½x1	1.25
W27488	10701	6/300; 8/25	Cb	2½x1 x1	1.10	(7589)					
27488A	11331	6/450; 8/25	Cb	2½x1½x1½	1.10	M68508	11295	5-10/25W. V. 40	Cb	1½x ¾x1½	.85
28068	10483	12/200	Cb	2½x1 x1	1.10	M64570-1	MSV				
29150A-B	11006	7/450; 6/400; 8/25	Mc	4½x1¾	2.30	P-10-450	11781	10/450	Cb	4½x1½x1½	1.40
29264	10348	16/150; 16/100; 8/25	Mc	3½x3½	2.40	M66140-4	10619	1/250; 3.6/100	Cb	2½x ¾	.90
29808	10402	12/250	Mc	2½x1¾	1.50	(6492)					
29809	11701	8/250; 8/25	Cb	2½x1 x1	1.10	M64570-G1	10710	10/450	Cb	¾x1¾x3¼	1.25
29907A-C	11734	8-8/450; 8/250	Mc	4½x1½	2.60	Spartan					
30419	11005	8/250; 8/25	Mc	3½x1¾	1.30	A10001	MA10735	6-10/250; 4/200	Cb	2½x2½x ¾	2.30
30124	11726	16-8/125; 16/100	Mc	4½x1¾	2.60	A 8123	10576	4/500	Cb	4½x1¾x ¾	1.20
30059A-C	11157	8/450; 8/250	Mc	5½x1½	2.70	A 9550	10745	5-5-25/150	Cb	2½x1¾x1½	2.35
34704	11757	16-16/100; 8/25	Mc	3½x1¾	1.90	A10118	10578	6-2/500	Cb	4½x1½x1½	1.80
26194B	11002	12-500	Mc	4½x1¾	1.90	A10277	10648	8-8/250	Cb	2½x2½x ¾	1.60
31631B	11382	12/300	Mc	3¼x1¾	1.55	A10318	10647	2/150	Cb	2½x ¾	.60
25542A	MA10011	4-8/450	Cb	4½x1¾x1½	1.60	A 8907	10414	8/200	Cb	2½x1 x1	1.00
25857B	10012	8/200; 8/25	Cb	2½x1½x1½	1.00	A 9308	10622	20/20	Cb	2½x ¾x ¾	.80
29150A	11146	7/450; 6/400; 8/25	Mc	4½x1¾	2.20	A 9754	10747	8-8/450	Mc	4½x1¾	2.10
26119A	10013	8/150; 4/300	Cb	2½x1 x1	1.25	A 8123	10536	4/500	Cb	4½x1¾x ¾	1.20
Emerson						A11093-1	11710	5-25-5/150	Cb	¾x2½x2¾	2.30
KC-68	10617	8/100; 4-16/150	Cb	4 x1½x1	2.20	Stewart Warner					
(H-5)						81059	MA10317	4-13/150; 7/150	Cb	1½x1¾x3¾	2.35
HC-32	10052	5-5/30	Cb	2½x1 x1	.90	81901	10316	8/150	Cb	1½x1 x2¼	.90
	10074	4-4-4/150	Cb	3 x2½x ¾	1.40	83734	11159	8-8/350	Cb	3½x1½x1¼	1.80
TC-89	10785	4-12-16/150	Cb	3 x1½x1¼	2.30	U. S. Radio & Tel.					
Erla						6508A	MA11748	8-8/300; 4-4/25	Cb	2½x1¾x1½	2.30
9442	10256	4-16-7/150	Cb	3¼x1½x1	2.30	6201	11787	12-4-4/150	Cb	2½x1¾x1½	2.40
9532	10435	16-16/300	Cb	2½x2½x1¼	2.00	Wells Gardner					
	11073	8-16-8/150	Cb	2½x2½x1¼	2.35	80894B	MA11003	8-8/450	Mc	4½x1½	2.00
9659	11179	8-8/450	Mc	4½x1¾	1.90	80894	11536	16/450; 4/350;	Cb	3½x1½x2¾	2.95
4400						(62-89)		6/150; 8/100			
1188	11180	8-8/350	Cb	2½x2 x1½	1.50	80944C	10269	8-8/150	Cb	3 x1½x1	1.40
9982	11465	8-8/100; 20/150	Cb	2½x2½x1¼	2.15	Zenith					
Grigsby Grunow (Majestic)						MA10629	8-8/250	Mc	1½x2¾	1.90	
31208-4B	11523	8-8/350	Cb	3½x1¾x1¾	1.90	10665	8-8/450	Mc	3½x1¾	1.90	
9979-66	10380	8-8/350	Cb	3¼x1¼x1¼	1.75	Standard Electrolytic Replacement Units					
9661-2	11338	8-8/350; 10/25	Cb	5 x1¾x1¾	2.20	C-D					
9661	11740	8-8-16/150; 10/25	Cb	4 x1½x1½	2.10	Part No.	Capacity	Working Volts	Spec.	Dimen- sions	Price
10536	11772	4/300; 6/350; 10/25	Cb	4½x1¼x1¼	2.20	11450	4-4	150	Cb	1½x1¼x1¼	\$1.00
30091-1	11524	8-8/450; 8/475;				10268	4-4	200	Cb	2½x1 x1¾	1.10
		12-12/25	Cb	2½x2¾x1¾	3.50	10270	4-8	150	Cb	3 x1 x1	1.15
	10729	8-16/125	Cb	2½x1¾x1	1.40	11795	4-8	200	Cb	4½x1¾x ¾	1.40
	10728	12-16/125	Cb	2½x1¾x1	1.55	11081	4-12	150	Cb	2½x1¼x1¼	1.30
	10727	16-16/125	Cb	2½x1¾x1	1.60	11126	4-16	100	Cb	2½x1¼x1	1.50
27151						11028	8-8	150	Cb	3 x1 x1½	1.45
501-555	11749	4-10-25/150; 4/25	Cb	2½x1¾x1½	2.60	11794	8-8	200	Cb	4½x1½x1½	1.50
8755						11043	8-8	200	Cb	4½x1¾x1	1.50
Pirate Chest	10449	8-4/450	Cb	4½x1¼x1¼	2.00	10375	8-16	150	Cb	4½x1¾x1	1.50
	11032	16-16/150	Cb	2½x1¾x1½	1.80	11133	8-16	200	Cb	3 x1 x2	1.60
	10384	16/450	Mc	1½x4¾	1.85	11734	8-8	450	Mc	3½x1½	2.15

"D-N LIST"

**MICA RECEIVING
CONDENSERS****Type 3**

Size 1"x5/8"x1/4"

1,000 Volts D. C. Test
600 Volts D. C. Working

Mfd.	Price	Mfd.	Price
.00004	\$.18	.001	\$.30
.00005	.18	.002	.42
.0001	.18	.003	.48
.00015	.24	.004	.54
.00025	.24	.005	.66
.00037	.24	.006	.72
.0005	.24		

**CORNELL-DUBILIER
GENERATOR CONDENSERS**

Regular type, heavy metal case and band, long heavy lead, 400 volts D. C.
No. SC4P5—.5 mfd., 2 1/4 x 1 1/4 in. \$0.72
No. SC4W1—.1 mfd., 2 1/4 x 1 1/4 in. 96

FORD TYPE, WITH BRACKET
No. FC-4P5—.5 mfd., 1 1/4 x 1/2 in. 72

**SECURITY
VALUE-PLUS
GENERATOR
CONDENSERS**

Standard type, metal case and band, long lead, 200 volts D. C.
No. GC5—.5 mfd. \$0.48
4 for \$1.70
No. GC1—.1 mfd. 64
4 for \$2.10

**ELECTRONIC VIBRATORS**

400—\$4.20
Buick, Olds, Pontiac—1 Unit Non Syn., 2 Unit Non Syn.
Chevrolet—1 Unit Non Syn., 2 Unit Non Syn., 364441.
Montgomery Ward—87.
Truetone—ZE21, 062 3rd Ser.
United Motors—2035, 4036.
Wells Gardner—V6Z2, Z6W1, Z6Z1.
Zenith—7, 460, 462, 650HD, 651HE, 660TD, 661TE.
410—\$4.50
Ford—Majestic.
Majestic—40-11805, 66, 116, 116A, 118.
440—\$5.10
Truetone—6R.
445—\$5.40
Motorola—61, 88.
450—\$4.50
Motorola—Dual 6, Twin 8.
Wells Gardner—Series 6U, 26U1.
P450—\$4.50
Ford—Philco.
Packard—1933-1934.
Philco—5, 6, 9, 10, 11, 51, 700, 800, 805, 806, 807, 808, 809, EF Elim., EG Elim., 1934 Models, FN.
452—\$4.50
Ford—Utah Repl. Zenith.
Sears-Roebuck—7128 (6 Prong).
453—\$4.50
Airline—118.
Cadillac—6U2 Standard.
General Electric—C60.

Goodrich—Wings 5 Tube.
Montgomery Ward—62-118.
Motorola—Plate Antenna, 34.
RCA—M107.
Sears-Roebuck—7128 (4 Prong).
Truetone—6U, 1312R, R131.
Truetone Ford—R131.
United Motors—1935 Non Syn.
Wells Gardner—Z6U1, 6S.
456—\$4.80
General Electric—D72.
RCA—RS63-1, 109, Ford.
458—\$4.80
Motorola—57, 75, 100, F57, F75, F100, GM57, GM75, GM100.
Truetone—5Y.
Zenith—1935 Models.
460—\$4.50
Airline—62.
Cadillac—(2721), 072 1st Series.
Montgomery Ward—Auto-Radio.
Truetone—062, 062A.
Wells Gardner—062, 062A.
466—\$5.10
Firestone—5 Tube, 6 Tube.
Truetone—6S.
470—\$5.10
Ford—Zenith.
Zenith—Junior 7.
700—\$6.00
Buick, Olds, Pontiac—1 Unit Syn., 2 Unit Syn.
Chevrolet—1 Unit Syn., 2 Unit Syn.

**OIL-FILLED
VIBRATOR
CONDENSERS
2,000 Volts D. C.**

Type VU—Vibrator Condensers

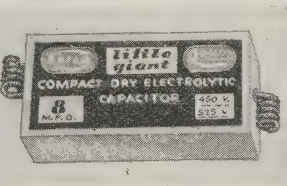
Cat. No.	Cap. Mfd.	Size L x W x D	List Price
VU-D7	.007	5/8x7/8x9/32	\$.54
VU-D8	.008	5/8x7/8x9/32	.54
VU-S1	.01	5/8x7/8x9/32	.48
VU-S2	.015	5/8x7/8x9/32	.54
VU-S3	.02	7/8x7/8x9/32	.54
VU-S3	.03	1 1/8x7/8x9/32	.54

Type VC—Tubular Oil Units

VC-S1	.01	1 5/8x5/8	.36
VC-S15	.015	1 5/8x5/8	.42
VC-S2	.02	1 5/8x3/4	.48
VC-S3	.03	2 1/8x1 1/16	.60
VC-S5	.05	2 3/16x3/4	.66
VC-S75	.075	2 3/16x13/16	.78
VC-PL	.1	2 3/16x13/16	.90

Type VL—Long—Thin

VL-S1 (1500V)	.01	3 3/16x17/32x3/8	.72
VL-P5 (200V)	.5	3 3/16x27/32x3/8	.78

**"LITTLE GIANT"**

Dry Electrolytic Condensers
New! Handy! Safe! Even smaller than present "Midget" sizes. Supplied with one lead from each end. "The smallest size electrolytics."

525 D. C. Volts Peak, 450 D. C.

Cat. No.	Cap.	Size Inches	List Price
LGS-2	.2	2-7/16x3/4x1/2	\$.78
LGS-4	.4	2-7/16x1 x 9/16	.90
LGS-8	.8	2-7/16x1 1/8x11/16	1.14

Working Volts

Karadio—56.

United Motors—4037, 4038.
701—\$5.80
Crosley—98, 99, 5A1, 102, 103, 119.
702—\$6.40
General Electric—B40, C41, B52, C61.
RCA—M34, M105, M116, DeLuxe (123).
704—\$6.40
Buick, Olds, Pontiac—Plug in Syn.
Chevrolet—Plug in Syn.
United Motors—Plug in Syn., 626, 627, 628, 629.
705—\$6.40
Motorola—S6, 44A, 66A, 77A.
Sears-Roebuck—7117, 1859A.
Tatro, L—6A, K665, H465, J665, 1465.
706—\$6.60
RCA—RC166.
General Electric—D50, D51, D52.
Montgomery Ward—5Y.
RCA—101, 104, 108.
Truetone—25Y1.
Wells Gardner—5Y.
708—\$6.70
Crosley—4A1, 5A3.
710—\$6.60
Cadillac—062W Standard, 062W Master (2722) 072 2nd Series.
Motorola—66, 77.
Wells Gardner—072, 072A, 06W.
711—\$6.70
Motorola—44, 55, 55A.

**EXACT DUPLICATE
CONDENSER BANKS
ATWATER-KENT**

Model	Manufacturer	Stock No.	Price
36 (Serial Number below 2,600,000)		5026	\$4.00
36 (Serial Number above 2,600,000)		5027	4.00
37-38 Condenser and Choke Assembly		5029	3.50
40-42-52-56-57 Condensers only		5030	3.40
44-45 Condenser and Output Choke Assembly		5031	4.00
46-47-53 Condensers only		5041	5.20
55-55C Early and Late Models —7 Taps.		5036	5.50
60-60C Early and Late Models —7 Taps.		5038	5.20
60-60C Late Models—5 Taps.		5039	5.20
83-83F-85-85F		5045	5.20

BRUNSWICK

15-22-32-42	5226	6.50
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CLARION

40	5241	6.80
51-53-55 Condenser and Chokes	5242	7.50
60 Jr.	5004	7.50
80	5245	4.20
84-85	5246	5.90
61	5248	7.50
67	5249	7.50
90-90A-91	5250	4.20
140	T3362	7.90
220	5251	4.90
260	5243	5.90
300	5244	4.90

EVEREADY

1-2-3 Condenser and Chokes.	5331	6.80
30-31-32-33-34	5332	5.90
40-42-43	5333	5.90
50-52-53-54	5334	5.90

FADA

45 (KU)	5349	5.90
60 (KA)	5353	5.90

GENERAL MOTORS

A Chassis 120-130-140-150-160	5421	6.80
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GREBE

SK4	5477	4.90
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GULBRANSEN

9 in line	5486	6.80
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JACKSON-BELL

62-63-64	5501	7.50
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MAJESTIC

20-21-22-23 Condenser, Choke and Input	5521	8.60
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30-31 Condenser and Choke Assembly	5522	6.00
50-51-52	5523	4.90
25B-25IB-25CB-254B	5539	4.90
35-351-353	5540	4.90
70-70B-71-72-7P6 New Type—5 Taps.	5525	3.70
70-70B-71-72-7BP6—5 Taps.	5527	3.80
90-91-92-100-101-9P6	5529	3.70
180-181-8P6-8P3	5530	6.80
90B-100B-102-103-93	5531	4.90
130-130A-230A-131-132-233	5532	4.90

MONTGOMERY WARD & CO.

Serenader 10,000 Dictator 500	5620	3.50
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PHILCO RADIO & TELEVISION CO.

20-220	5636	4.90
65	5369	4.90
76-77-77A	5640	5.90
82	5641	4.90
86	5643	4.90
87	5644	4.90
95-96-296-111-211-112-212	5645	5.90
511-512-521-531, etc.	5646	4.90

RADIOLA

17-50	5661	4.90
R8-R10-R12	5772	7.70
R5-R7A-R9-R43	5773	3.50
M34	5774	6.80
42-48	5667	7.20
60	5669	5.90
62	5670	5.90
64	5672	9.90
80-82-86	5675	5.90

R. C. A. VICTOR

R4-R6	5765	7.50
R11-R18-R18A-RE21	5766	5.90
R14-R15-R17	5767	7.50
R32-RE45-R52-RE75 Early Model 4 Lugs.	5770	4.50
R32-RE45-R52-RE75 Late Model 4 Lugs.	5771	4.50

SILVER-MARSHALL

30B-60B-75B-95B-90B	5856	6.80
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SPARTON

89A	5874	7.90
301	5876	8.40
930	5877	6.50

U. S. RADIO & TELEVISION CO.	
28-28AX-48-48A	5991 4.40
36	5992 5.90
41	5993 3.90
46-46A	5996 3.40
47-47A	5997 3.40
Case 80-81	5998 6.00

WESTINGHOUSE

WR4	6026	7.50
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STEWART-WARNER

950 Series 951-953-961-962-963		
6 1/2 Mfd. Filament Condenser	5939	3.50
950 Series 951-953-961-962-963		
Choke and By-Pass Assembly	5940	6.80

ZENITH

ZE18-35PX-35APX-37A	6054	6.80
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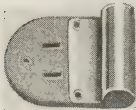
"D-N LIST"

SOLAR *Elim-O-Stat*

RADIO NOISE SUPPRESSORS

A complete new line of scientifically designed noise suppressors—small, inexpensive and simple to use. It is impossible to give you the complete details of this line in this limited space—therefore, we urge you to write to us for the Free Big Solar Technical Book and Catalog No. EL-1.

FOR USE DIRECTLY AT THE RECEIVER



Type RA—Designed for use with radios which are receiving a small amount of hum through the power lines. Attaches easily on line plug. Can also be used on small appliances. An easily sold item. Max. current, 5 amps. List price.....\$0.48

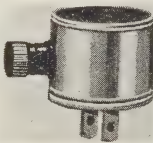
Type RB—Designed for same usage as Type RA, but is a heavier duty type. Plugs into power line. Max. current 5 Amps. List price.....\$0.90



Type RN—Designed to prevent all types of radio noises from passing into the radio from power line. Effective on wave lengths from 15 to 2,000 meters, due to sectional band-suppression construction. Easily connected to radio through line plug and convenience outlet supplied with unit. Max. current 3 Amps. List price.....\$6.00

FOR USE WITH DISTURBING ELECTRICAL DEVICES

Type AD—Designed for use on small appliances and really reduces radio noises over a wide frequency range. Plugs into power line and requires a short return wire to frame of appliance. Max. current 5 amps. List price.....\$1.50



Type AF—Designed for heavier duty work. This is a capacitive-inductive type and should not be confused with cheap filters. Max. current 5 amps. List price.....\$4.80

Type AG—A real heavy duty capacitive-inductive type of noise filter. Effective on all waves from 15 to 2,000 meters due to sectional band-suppression circuit. Same construction as Type AF. List price.....\$6.00

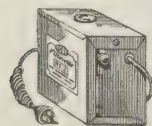
Type AH—A real heavy duty capacitive-inductive type of filter. When used with a multiple plug, the AH will filter out several appliances at once. Same construction as Type AF. Max. current 6 Amps. List price.....\$7.80

TYPE AL—Especially designed to be used on all types of oil burners. Constructed in a metal cut-out box with facilities for connecting BX. Guaranteed to clear up noises due to oil burners. List price.....\$9.00



Type DJ—Dial Telephone Elim-O-Stat. Can be installed in few minutes without disturbing telephone installation. List price.....\$1.50

Tobe Power Line Filter No. 7—A very effective plug-in type device for filtering AC line ahead of radio. List price.....\$1.20



Tobe Power Line Filter RF-2—A heavy duty filter device that contains both condensers and chokes. Is used ahead of radio in AC or DC line. List price.....\$5.90

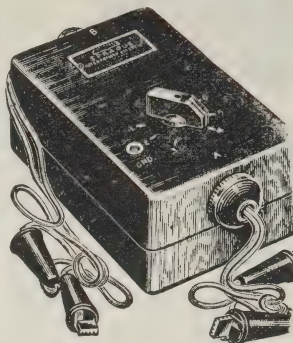
SPRAGUE INTERFERENCE ANALYZER

Shows Exactly Where Interference Originates and Tells How To Eliminate It!

Complete with adapters. List price.....\$19.50

21 Different Filtering Combinations

Shows exactly what condensers and chokes are needed to eliminate radio interference. Connects in circuit of the electrical appliance suspected of causing interference. With radio turned on the Analyzer switching device is adjusted to various positions indicated on panel. This automatically connects different filter banks into the circuit until combination is found which eliminates interference most effectively. Reference is then made to an instruction chart which specifies Sprague interference condensers and chokes to be used to get the same filter combination. The exact same combination of condensers that were used to eliminate the interference with the Analyzer are specified on chart. Look for interference in the new, up-to-date way. Housed in a compact bakelite case 4 1/2 in. wide, 7 in. high and 3 in. deep. For use on 110 volts.



Prove to Your Customers
Demonstrate to your customers how interference may be eliminated by use of proper filtering equipment. Opens new opportunities in eliminating interference from line noises, small appliance motors, oil burners, all types of electric motors, flashing traffic lights, dentists' and physicians' appliances. The Analyzer will also help you sell antenna systems by demonstrating noises picked up by the antenna.

SPRAGUE INTERFERENCE ELIMINATION CONDENSERS AND CHOKES

These condensers and chokes are designed for interference elimination. Use as indicated by the Interference Analyzer listed above or as specified opposite each type listed. The highest quality types of condensers and chokes available for interference elimination.

SPRAGUE TYPE IF-11

A Dual condenser for silencing motors such as found on refrigerators, fruit juice extractors, oil burners, sign flashers, printing presses, lathe and drill presses, etc. In bad cases of interference choke may be required, but in 80% of cases condenser alone will suffice. See Diagrams II and III for suggested installation. List price.....\$3.00



SPRAGUE TYPE IF-50

Oil-filled condenser for silencing small motors requiring higher capacity units. Two may be connected in series when necessary. List price.....\$2.10



SPRAGUE TYPE IF-33, IF-21

A Tubular 2-lead condenser for eliminating interference from fractional horsepower motors found in mixers, small fans, humidifiers, beer pumps, portable electric tools, hair driers, etc. See Diagram I. Type IF-33. List price....\$0.90 Type IF-21. List price....1.20



SPRAGUE TYPE CH-1

Speci ally designed choke will carry up to 10 amperes capacity approximately to use on 1 horsepower motor. Choke is enclosed in sturdy metal can. List price.....\$1.60

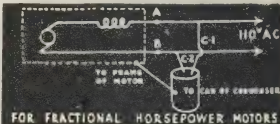


DIAGRAM I—Showing how Type IF-33 or Type IF-21 Sprague interference condensers may be connected across motors. Two short condenser leads are connected across motor as close as possible. Mounting Bracket or common terminal should be connected to motor frame.

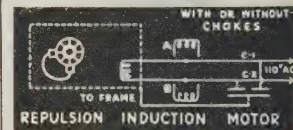


DIAGRAM II—Typical Type IF-11 condenser installation. Metal condenser container is common plate of dual condenser. Make connections as close to motor as possible.

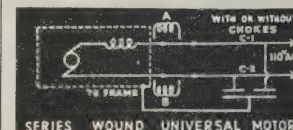


DIAGRAM III—Another IF-11 installation. In bad cases of interference connect series choke. CH-1 at points A or B or at both. Same for Diagram II.

METAL BOXES FOR Mounting Individual Units

Enables mounting in one metal container combinations of individual condensers and chokes. Punched, drilled and marked. Hinged cover. Size: 6x6x3 in. No. SI-B. List price....\$1.80

SPRAGUE EMERGENCY KIT

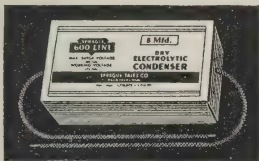
No. 1

Contains one of each of the five most used capacities in the "600" line. Compact cardboard cases with leads—one of each: 8, 6, 4, 2 and 1 Mfd.

List\$6.70

Sprague Emergency Kit No. 2 is same as No. 1 except that it contains two each of the sizes listed.

List\$13.40



THE NEW IMPROVED "600"

HANDY UNITS

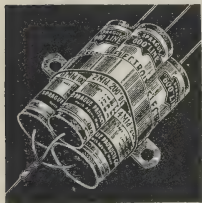
COMPACT DRY ELECTROLYTICS

Cardboard Cases

Peak Volts D.C., 600.

D.C. Working Volts, 475

Cat. No.	Cap. Mfd.	Size	List
EC-1	1	2-7/16x1 1/8 x 9/16 in.	\$1.02
EC-2	2	2-7/16x1 1/8 x 9/16 in.	1.14
EC-4	4	2-7/16x1 1/8 x 11/16 in.	1.38
EC-6	6	2-7/16x1 1/8 x 1 1/8 in.	1.56
EC-8	8	2-7/16x1 1/8 x 1 1/8 in.	1.62



AC-DC
LO-VOLTAGE
TUBULAR
DRY
ELECTRO-
LYTICS

Pigtail leads of covered wire. Will withstand high temperatures of midget sets. Cut shows example of three of these condensers strapped together.

Cat. No.	Cap. Mfd.	D.C. Volts	Size	List
HC-5	5	25	2 1/2 x 5/8 in.	\$0.60
HC-10	10	25	2 1/2 x 11/16 in.	.72
HC-510	10	50	2 1/2 x 11/16 in.	.96
HC-25	25	25	2 1/2 x 15/16 in.	1.02
HC-525	25	50	2 1/2 x 1 in.	1.32
HC-44	4-4	150	2 1/2 x 13/16 in.	1.26
HC-55	5-5	50	2-7/16x1 1/8 in.	1.02
HC-100	10-10	25	2 1/2 x 1 in.	1.02
ST-42	4	200	Made In	.84
ST-82	8	200	In	1.08
ST-122	12	200	Smallest	1.26
ST-162	16	200	Sizes	1.44
ST-252	25	200	Possible	1.56
ST-44	4-4	200		1.14
ST-88	8-8	200		1.56
ST-812	8-12	200		1.68
ST-816	8-16	200		1.80
ST-41	4	100		.72
ST-81	8	100		.90
ST-121	12	100		1.08

MOTOR STARTING CONDENSERS FOR ELECTRIC REFRIGERATORS

Exact Duplicate Replacement Types

When ordering condensers other than those shown below, be sure and specify the name of either the Motor Manufacturer, Refrigerator Manufacturer and also capacity, voltage and size of condenser. The special part number that appears on the condenser will be of considerable assistance to us in insuring your getting the correct replacement.

Condensers listed below are of the universal type and will take care of 95% of your requirements on replacements for motor starting condensers.

Part No.	Capacity	Voltage	Dimensions	List Price
A2134	80 Mfd.	110v.	2 in. diam. x 4 1/8 in. high	\$4.80
A2096	80 Mfd.	110v.	2 1/2 in. diam. x 4 1/8 in. high	4.80
A2093	80 Mfd.	110v.	2 3/8 in. diam. x 3 3/8 in. x 4 1/8 in. high	4.80
A2135	100 Mfd.	110v.	2 in. diam. x 4 1/8 in. high	5.40
A2097	100 Mfd.	110v.	2 1/2 in. diam. x 4 1/8 in. high	5.40
A2094	100 Mfd.	110v.	2 3/8 in. diam. x 3 3/8 in. x 4 1/8 in. high	5.40
A2136	115 Mfd.	110v.	2 in. diam. x 4 1/8 in. high	6.00
A2098	115 Mfd.	110v.	2 1/2 in. diam. x 4 1/8 in. high	6.00
A2095	115 Mfd.	110v.	2 3/8 in. diam. x 3 3/8 in. x 4 1/8 in. high	6.00

"D-N LIST"

SPRAGUE

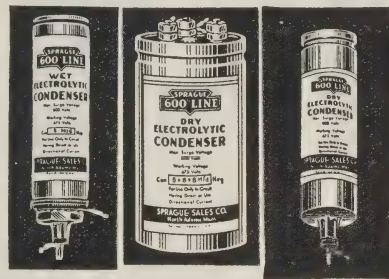
"600" LINE

GUARANTEED!

Sprague "600" Line and Emergency Unit Condensers are fully guaranteed against defects in materials and workmanship. The voltage ratings and capacity ratings on all condensers are absolutely as specified—

WE GUARANTEE THIS UNCONDITIONALLY. And finally, the Sprague "600" Line is YOUR guarantee to the customer.

DRY AND WET ELECTROLYTICS IN ROUND METAL CONTAINERS



Peak Volts D.C., 600
D.C. Working Volts, 475

Dry, Inverted, Screw Type

Cat. No.	Cap. Mfd.	Size	List
SC-4	4	3x1 in.	\$1.50
SC-8	8	4-7/16x1 1/8 in.	1.80
CL-88	8-8	4-7/16x1 1/8 in.	2.88

Dry, Upright, Multiple Units

AC-88	8-8	4-7/16x1 1/8 in.	\$2.88
AC-888	8-8-8	4 1/2 x 3 in.	4.80
AC-515	5-15	4 1/2 x 2 1/2 in.	4.00
AC-9918	9-9-18	4 1/2 x 3 in.	6.96
AC-8888	8-8-8-8	4 1/2 x 3 in.	6.40
AC-8836	8-8-18-18	4 1/2 x 3 in.	9.00

Wet Electrolytics, Inverted

Cat. No.	Cap. Mfd.	D.C. Working Volts, 435	List
WC-4	4	4 1/2 x 1 in.	\$0.96
WC-8	8	4 1/2 x 1 in.	1.14

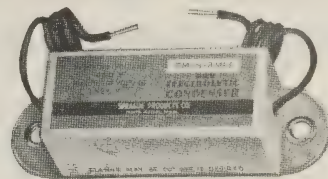


OIL IMPREG-
NATED
VIBRATOR
CONDENSERS

Housed in Metal Cans—Fully Sealed. 1,500 Volt Rating

Cat. No.	Cap. Mfd.	Size	List
AR-11	.01	1-11/16x13/16x 1/4 in.	\$0.54
AR-12	.02	1-11/16x13/16x 1/4 in.	.54
AR-13	.03	1-11/16x13/16x 1/4 in.	.54
AR-14	.04	1-11/16x13/16x 1/4 in.	.54
AR-15	.05	1-11/16x13/16x 1/4 in.	.54
MV-11	.01	3x9/16x 3/4 in.	.54
FR-11	.01	1 1/8 x 1 1/8 in.	.54
LR-27	.007	1-1/16x 7/8 x 1/4 in.	.54
LR-11	.01	1-1/16x 7/8 x 1/4 in.	.54
LR-12	.02	1-1/16x 7/8 x 1/4 in.	.54

SPRAGUE "TINY-MIKE" DRY ELECTROLYTICS



450-Volt Working Voltage

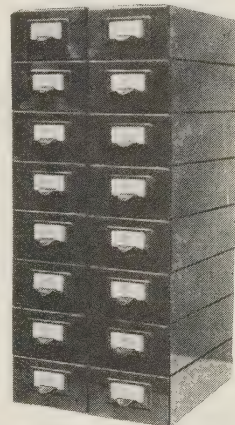
Small enough to fit any space. Large enough not to overheat.

Cat. No.	Cap. Mfd.	D.C. Dimensions	List Price
TM-1	1 450	13/16x13/16x2 1/2 in.	\$0.66
TM-2	2 450	13/16x13/16x2 1/2 in.	.78
TM-4	4 450	1x1x2 1/2 in.	.90
TM-6	6 450	1 1/4 x 1 1/4 x 2 1/2 in.	1.08
TM-8	8 450	1 1/4 x 1 1/4 x 2 1/2 in.	1.14
TM-10	10 450	1 1/4 x 1 1/4 x 2 1/2 in.	1.38
(4 Leads)			
TM-44	4-4 450	1-1/16x1-1/16x2 1/2 in.	1.44
TM-88	8-8 450	2x1-1/16x2 1/2 in.	1.80



ADD-A-UNIT
CABINET
FREE

Two outstanding condenser deals. One of these heavy gauge steel cabinet drawers with each deal. Finished in dark olive green. Full size. The condensers are the famous Tobe. Study these deals over and you'll order at once.



CONDENSER

KIT NO. 1

Contains 34 Tobe Surgeproof Tubular Paper Condensers, assorted values as follows: 3—.001, 2—.002, 3—.005, 5—.01, 5—.02, 5—.05, 5—.1, 3—.25, 3—.5 Mfd. at 600 and 400 volts. Regular value \$9.90 and you get a cabinet drawer absolutely free.

These drawers have slots and tabs so they can be fastened together. No. CK1.....\$9.90

TOBE CONDENSER KIT NO. 2

Contains two 8 Mfd. metal can, five 8 Mfd. and two 4 Mfd. cardboard container electrolytic condensers—all rated at 500 volts. Regular value \$10.00 and you get a cabinet drawer, value \$2.00, absolutely free.

No. CK2.....\$10.00

SOLAR MICA CONDENSER KIT Value-Plus!



Contains an assortment of ten bakelite case mica condensers—600-volt rating—one each of sizes ranging from .00005 to .002 Mfd. You save nearly 50% by buying this kit.

No. K-13.....\$1.48

SOLAR TUBULAR PAPER CONDENSER KIT

Contains 10 assorted tubular condensers—values ranging from .01 up to .5 Mfd. at 400 volts. A real buy.

No. K-5.....\$2.40

SECURITY CONDENSERS

ROCK BOTTOM PRICES—ON QUALITY CONDENSERS

We guarantee all Security Condensers to be brand new, fresh, first quality condensers. Produced by one of the largest and best known condenser manufacturers. Do not compare Security Condensers with cheap, job lot "close-outs." You are getting real honest high grade quality condensers—fully guaranteed under the Standard R. M. A. guarantee.



COMPACT TUBULAR CONDENSERS

D. C. Test V. 1500—D. C. Work V. 600

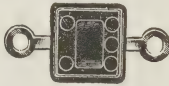
Cat. No.	Cap. Mfd.	Size		List Price
		L	D	
ST-6001.....	.001	1"	7/16"	\$0.14
ST-6002.....	.002	1"	7/16"	.14
ST-6003.....	.003	1"	7/16"	.14
ST-6005.....	.005	1"	7/16"	.14
ST-6006.....	.006	1"	7/16"	.14
ST-601.....	.01	1"	7/16"	.14
ST-602.....	.02	1"	7/16"	.14
ST-605.....	.05	1 1/4"	9/16"	.16
ST-61.....	.1	1 7/16"	1 1/16"	.18
ST-625.....	.25	1 3/4"	1 5/16"	.30
ST-65.....	.5	2"	1 5/16"	.44

D. C. Test V. 1000—D. C. Work V. 400

ST-401.....	.01	1"	7/16"	\$0.12
ST-402.....	.02	1"	7/16"	.12
ST-403.....	.03	1"	1/2"	.12
ST-405.....	.05	1 1/8"	9/16"	.12
ST-41.....	.1	1 7/16"	9/16"	.16
ST-425.....	.25	1 5/8"	1 3/16"	.20
ST-45.....	.5	1 3/4"	1 5/16"	.30
ST-140.....	1.	2"	1 1/4"	.48

You may deduct 10% from your net cost if you purchase 20 assorted Security Condensers in one order.

MICA RECEIVING CONDENSERS



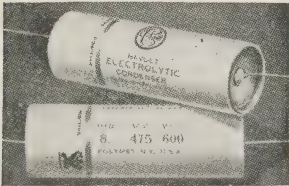
TYPE MA

All 1,000 Volts D.C. Test.

D.C. Work Volts, 500.

.00005, .0001, .00015, .0002, .0003, .0004, .0005, .00075, .001. Each.....	\$0.16
.002, .003. Each.....	.24
.004, .005, .006. Each.....	.36

POLYMET MIDGET TUBULAR DRY ELECTROLYTICS



One of the best and the smallest line of electrolytics on the market. Has pure aluminum caps on each end.

Cat. No.	Cap. Mfd.	Work Volts	Size		List Price
			L	D	
PY-5100.....	5	100	1 3/4"	5/8"	\$0.50
PY-10100.....	10	100	2 1/4"	5/8"	.56
PY-4300.....	4	300	2 1/4"	3/4"	.50
PY-8300.....	8	300	3"	3/4"	.66
PY-2500.....	2	475	1 3/4"	3/4"	.66
PY-4500.....	4	475	2 1/4"	3/4"	.70
PY-8500.....	8	475	3"	3/4"	.74

DRY ELECTROLYTICS



In round metal containers.

Single and multiple sections.

D.C. test voltage, 600.

D. C. working voltage, 475.



Cat. No.	Cap. Mfd.	Size		List Price	Ten For
		H	D		
SDC-8U.....	8.	3 1/2"	1"	\$0.80	\$ 7.40
SDC-8I.....	8.	3 1/2"	1"	.80	7.40
SDC-88.....	8-8	4 1/2"	2 1/2"	1.40	13.30
SDC-515.....	5-15	4 1/2"	2 1/2"	1.60	14.40
SDC-888.....	8-8-8	4 1/2"	3"	2.00	18.20
SDC-9918.....	9-9-18	4 1/2"	3"	2.80	....
SDC-1285.....	12-8 200V. 35V.	4 3/8"	1 3/8"	\$1.80	....
SDC-1685.....	16-8 200V. 35V.	4 3/8"	1 3/8"	1.90	....
SDC-245.....	24-12 200V. 35V.	4 3/8"	1 1/2"	2.10	....

CASED PAPER CONDENSERS

Standard Sizes

D. C. Test V. 1000—D. C. Work V. 400

Cat. No.	Cap. Mfd.	Size			List Price
		L	W	D	
SC-1.....	.1	1 3/4"	1"	3/4"	\$0.46
SC-25.....	.25	1 3/4"	1"	3/4"	.51
SC-5.....	.5	1 3/4"	1"	3/4"	.70



UNCASED PAPER TYPE

D. C. Test V. 1000—D. C. Work V. 400

Cat. No.	Cap. Mfd.	Size			List Price
		L	W	D	
SU-450.....	.5	2"	1"	1/2"	\$0.46
SU-410.....	1.0	2"	1 3/8"	3/4"	.78
SU-420.....	2.0	2"	1 7/8"	1"	1.08

D. C. Test V. 1500—D. C. Work V. 600

SU-650.....	5	2"	1 3/8"	1 1/2"	\$0.56
SU-610.....	10	2"	1 7/8"	3/4"	.78
SU-620.....	2.0	3 3/8"	1 7/8"	7/8"	1.30



SPARTON TYPE CONDENSERS

.25 Mfd.—500 Volt.....\$0.50

Ten for No. SDS-25.....4.60

1 Mfd.—200 Volt......60

Ten for No. SDS-10.....5.80

"D-N LIST"

Dry Electrolytics

Cardboard Containers



Sealed, heavy duty construction. Each lead separate, no commons. Mounting flanges. Accurate ratings.

COMPACT SIZES

D. C. Test V. 600—D. C. Work V. 475

Cat. No.	Cap. Mfd.	Size			List Price	Ten For
		L	W	H		
SDE-4.....	4.	2 3/8"	7/8"	7/8"	\$0.44	\$4.20
SDE-8.....	8.	3 1/8"	1"	1"	.50	4.80
SDE-44.....	4-4	2 3/8"	7/8"	1 1/2"	.76	7.00
SDE-88.....	8-8	3 1/8"	1"	1 1/2"	.96	9.00

LOW VOLTAGE FOR AC-DC SETS

D. C. Test V. 325—D. C. Work V. 250

SLVS-4.....	4.	2 3/4"	7/8"	1 1/4"	\$.58	\$5.00
SLVS-8.....	8.	3"	1 1/8"	1 1/4"	.74	7.00

D. C. Test V. 200—D. C. Work V. 150

SLVS-4.....	4.	2 1/8"	3/4"	1 1/2"	\$.46	\$ 4.40
SLVS-8.....	8.	2 1/8"	3/4"	1 1/2"	.64	6.00
SLVS-12.....	12.	2 1/8"	3/4"	1 1/2"	.70	6.60
SLVS-44.....	4-4	2 1/8"	3/4"	1 1/2"	.84	7.80
SLVS-48.....	4-8	2 3/8"	7/8"	1 1/2"	.90	8.40
SLVS-88.....	8-8	2 3/8"	7/8"	1 1/2"	1.00	9.10
SLVS-812.....	8-12	3"	1 1/2"	1 1/2"	1.20	10.80
SLVS-816.....	8-16	3"	1 1/2"	1 1/2"	1.30	12.00
SLVS-866.....	8-16-16	4 1/8"	7/8"	1 1/4"	2.40	....

SLVS-1285.....	12-8 200V. 35V.	2 3/8"	7/8"	1 5/8"	\$.96	\$ 9.00
SLVS-1685.....	16-8 200V. 35V.	2 3/8"	7/8"	1 5/8"	1.04	10.00
SLVS-2455.....	24-12 200V. 35V.	3 1/8"	1"	1 5/8"	1.22	....

D. C. Test V. 35—D. C. Work V. 25

SLVD-55.....	5-5	2 1/8"	3/4"	3/4"	\$.64	\$6.00
SLVD-1010.....	10-10	2 1/8"	7/8"	7/8"	.66	6.20

DRY ELECTROLYTICS



Tubular Containers

D. C. Test V. 600—D. C. Work V. 475

Cat. No.	Cap. Mfd.	Size		List Price	Ten For
		L	D		
SDE-1.....	1	2 1/4"	3/4"	\$0.44	\$4.20
SDE-2.....	2	2 1/4"	7/8"	.48	4.40

D. C. Test V. 200—D. C. Work V. 150

SDLV-4.....	4	2 1/4"	3/4"	\$.52	\$5.00
SDLV-8.....	8	2 1/4"	1"	.64	6.00

D. C. Test V. 150—D. C. Work V. 100

SDLV-5100.....	5	2 1/4"	3/4"	\$.50	\$4.80
SDLV-1010.....	10	2 1/4"	1"	.64	6.00

D. C. Test V. 75—D. C. Work V. 50

SDLV-550.....	5	2 1/4"	5/8"	\$.44	\$4.20
SDLV-1050.....	10	2 1/4"	3/4"	.50	4.80
SDLV-2550.....	25	2 1/4"	7/8"	.72	7.00

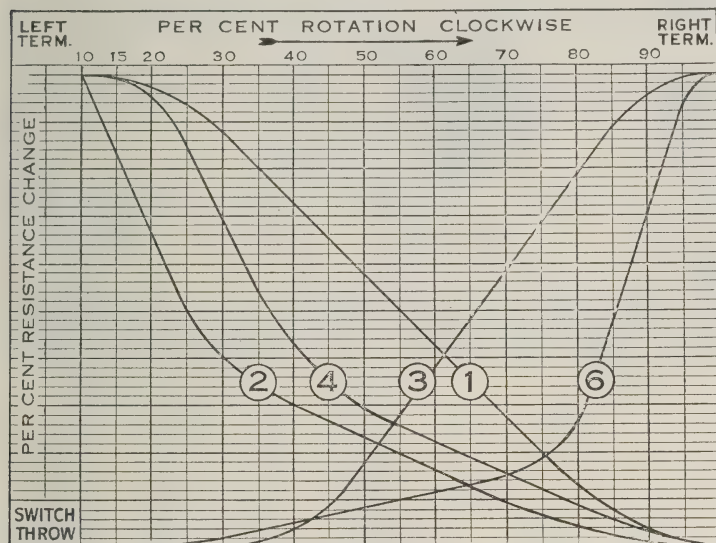
D. C. Test V. 35—D. C. Work V. 25

SDLV-525.....	5	1 7/8"	5/8"	\$.44	\$4.20
SDLV-1025.....	10	1 7/8"	3/4"	.46	4.40
SDLV-2525.....	25	2 1/4"	7/8"	.52	5.00

Centralab

CENTRAL RADIO LABORATORIES

Replacement Volume Controls



SELECTING THE PROPER VOLUME CONTROL

Curve form or taper of a variable resistance is more important to satisfactory control than its maximum resistance. Every Centralab control is made to a particular curve that is numbered and charted above. This chart indicates the per cent resistance change with rotation.

The ten heavy vertical lines represent every 10% the knob is rotated, the LEFT TERM. indicating the minimum volume end of rotation. The horizontal lines proportion the resistance change and divide equally whatever maximum resistance may be established for the curve.

Curves 1, 2 and 4 are illustrated as measured from the right terminal because they commonly carry a substantial amount of current from that end. Curves 3 and 6 are measured from the left terminal because they are principally used in shunt circuits where the taper from the left end is most important.

Usual application of the various curve forms are:

CURVE 1—Has uniform resistance change from either end. Use as regeneration or screen grid potentiometer. Has uniform load characteristic, dissipating 1 watt through total resistance, ½ watt through half the total resistance, etc.

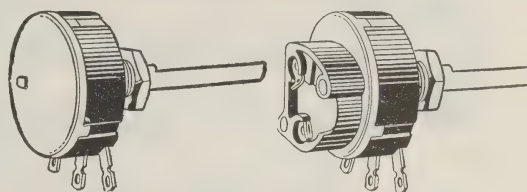
CURVE 2—Low resistance change at maximum volume, the rate of resistance change progressively increasing as the knob is rotated counter-clockwise. Sometimes called a counter-clockwise or reverse log. Taper. Use as a series rheostat in the cathode or plate circuit where the current carried may be heavy at maximum volume, but very small at minimum volume.

CURVE 3—Very slow resistance change from minimum volume end with smooth change from right end. A curve for the popular antenna C-bias circuit. Use where the control changes the bias of one or two tubes and the shunt effect on the antenna is of principal importance in volume control. DO NOT use when controlling the bias of more than two tubes or with heavy bleeder current for this curve may be overloaded and eventually burn out.

CURVE 4—Slow resistance change from maximum volume with a short taper from the left end for the antenna shunt. With the same over all resistance as Curve 3, this Curve 4 will carry much more current in the C-bias circuit because of the more gradual resistance change from the right end. Use where the C-bias change gives the principal volume control effect.

CURVE 6—A log. curve with slow resistance change from the left end. Use as a straight antenna shunt without C-bias connection. Also popular in the higher resistances as an audio grid or tone control.

STANDARD RADIOHMS



\$1.20

Less Switch

\$1.80

With Switch

Case diameter 1 3/8 in. Depth 9/16 in.

Shaft 2 1/4 in. long, milled flat. May be cut to exact length needed.

Catalog Number	Switch	Without Switch	With Switch	Usual Circuit Location	Resistance
72-118	62-118			Voltage Divider.....	500 1
72-107	62-107			Voltage Divider.....	1000 1
72-101	62-101			Voltage Divider.....	2000 1
72-108	62-108			Voltage Divider.....	3000 1
72-109	62-109			Voltage Divider.....	4000 1
72-110	62-110			Voltage Divider.....	5000 1
70-204	52-204			Antenna Shunt.....	5000 6
72-114	62-114			Antenna, C-bias.....	10000 1
72-113	62-113			Antenna, C-bias of One Tube.....	10000 3
70-205	52-205			Antenna C-bias of Two Tubes.....	10000 4
72-100	62-100			Antenna Shunt.....	10000 6
72-115	62-115			Antenna, C-bias.....	15000 3
79-006	99-006			Antenna, C-bias.....	15000 4
72-119	62-119			Antenna, C-bias.....	20000 3
72-111	62-111			Voltage Divider.....	25000 1
70-206	52-206			C-bias.....	25000 4
72-102	62-102			Antenna Shunt.....	25000 3
72-103	62-103			Voltage Divider.....	50000 1
72-117	62-117			Tone Control.....	50000 6
72-123	62-123			Tone Control.....	75000 6
70-202	52-202			C-bias.....	75000 4
72-104	62-104			Voltage Divider.....	100000 1
72-122	62-122			Audio Grid or Tone.....	100000 6
72-120	62-120			Audio Grid or Tone.....	200000 1
72-131	62-131			C-bias.....	200000 4
72-121	62-121			Audio Grid or Tone.....	250000 6
72-105	62-105			Audio Grid or Tone.....	500000 6
72-106	62-106			Voltage Divider.....	500000 1
70-203	52-203			Series in R. F. Plate.....	500000 2
72-134	62-134			Tapped Audio Grid.....	500000 6
72-116	62-116			Audio Grid or Tone.....	1 Meg 6
72-135	62-135			Tapped Audio Grid.....	1 Meg 6
72-132	62-132			Audio Grid or Tone.....	3 Megs 6

SEPARATE RADIOHM SWITCH COVER

Any plain Radiohm catalogued above may be converted to the switch type by replacing the plain cover with this switch cover.

No. 10 Switch Cover..\$0.60

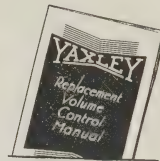
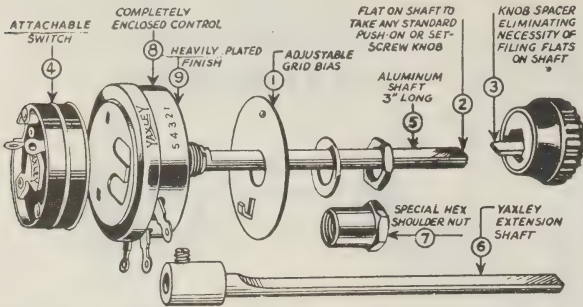


Ask for the
1936 Volume Control
Guide
FREE

New Replacement

YAXLEY

Volume Controls



Free
With Any Size
Order For
Yaxley Controls

YAXLEY Volume Control Kit

Consisting of 6 volume controls—one each of the six fastest selling types: 1 No. E, 1 No. G, 1 No. K, 1 No. M, 1 No. N, 1 No. O. **Total list value \$7.20 AND you get FREE** one Yaxley Volume Control Wrench, and the Volume Control Manual.

UNIVERSAL CONTROLS— SINGLE

Prices do not include switch or accessories

Catalog No.	Type	Ohms	Taper
R.....	WW	2.....	IV.....
Q.....	WW	6.....	IV.....
S.....	WW	10.....	IV.....
T.....	WW	20.....	IV.....
U.....	WW	30.....	IV.....
V.....	WW	60.....	IV.....
W.....	WW	100.....	IV.....
X.....	WW	200.....	IV.....
A.....	WW	500.....	I.....
B.....	WW	1M.....	I.....
C*.....	WW	2M.....	II.....
C12*.....	WW	2M.....	I.....
D*.....	WW	3M.....	II.....
D7*.....	WW	3M.....	VII.....
D12*.....	WW	3M.....	I.....
E*.....	WW	5M.....	II.....
E7*.....	WW	5M.....	VII.....
E12.....	Carbon	5M.....	I.....
F*.....	WW	7,500.....	II.....
F7*.....	WW	7,500.....	VII.....
F12.....	Carbon	7,500.....	I.....
G*.....	WW	10M.....	II.....
G7.....	WW	10M.....	VII.....
G12.....	Carbon	10M.....	I.....
H*.....	WW	15M.....	I.....
H7*.....	WW	15M.....	VII.....
H12.....	Carbon	15M.....	I.....
Y.....	Carbon	20M.....	I.....
J.....	Carbon	25M.....	II.....
K.....	Carbon	50M.....	II.....
K12.....	Carbon	50M.....	I.....
Z.....	Carbon	75M.....	II.....
Z12.....	Carbon	75M.....	I.....
L.....	Carbon	100M.....	I.....
M.....	Carbon	250M.....	I.....
N.....	Carbon	500M.....	I.....
O.....	Carbon	1 Meg.....	I.....
P.....	Carbon	2 Meg.....	I.....
UC-501.....	Carbon	10M.....	II.....
UC-502.....	Carbon	15M.....	I.....
UC-503.....	Carbon	75M.....	I.....
UC-504.....	Carbon	3 Meg.....	I.....
UC-505.....	Carbon	4 Meg.....	I.....
UC-506.....	Carbon	5 Meg.....	I.....
UC-507.....	Carbon	5 Meg.....	II.....
UC-508.....	Carbon	9 Meg.....	I.....
UC-509.....	Carbon	250 M.....	II.....
UC-610.....	Carbon	100M.....	II.....
UC-511†.....	Carbon	250M.....	I.....
UC-512†.....	Carbon	500M.....	I.....

*—Has exclusive Yaxley adjustable bias feature.

†—Has slotted shaft for automobile receivers.

WW—Wire Wound.

List price. **\$1.20**

Each

UNIVERSAL "DUAL" CONTROLS

Prices do not include switch or accessories

Catalog No.	Type	Ohms Front	Resistance Rear
CE.....	WW	2M	5M
GE (Formerly DRP-192).....	WW	10M	5M
GG.....	WW	10M	10M
GK.....	Carbon	10M	50M
LL.....	Carbon	100M	100M
LM.....	Carbon	100M	250M
MM.....	Carbon	250M	250M
MN.....	Carbon	250M	500M
NN.....	Carbon	500M	500M

List price. **\$3.00**

Each

UNIVERSAL "TAPPED" CONTROLS

Prices do not include switch or accessories.

Catalog No.	Total Resistance	Tapped at Ohms
TRP 600.....	6M	2,500
TRP 601.....	30M	6,000
TRP 602.....	63M	3,000
TRP 603.....	250M	Center Tapped
TRP 604.....	350M	25,000
TRP 605.....	350M	75,000
TRP 606.....	500M	100,000
TRP 607.....	500M	Center Tapped
TRP 608.....	1 Meg	200,000
TRP 609.....	1 Meg	Center Tapped
TRP 610.....	1 Meg	20,000
TRP 611.....	1 Meg	170,000
TRP 612.....	2 Meg	25,000

List price. **\$1.80**

Each

AC CONTROL SWITCHES

No. 9—Single Pole Single Throw..	\$0.60
No. 8—Single Pole Double Throw..	.72
No. 7—Double Pole Single Throw..	.72

CONTROL MOUNTING BRACKETS Adjustable

RB248—1 3/4" centers	\$0.24
RB249—2 1/2" centers	.24

EXTENSION SHAFTS

RS242—4"x1/4" Dia. x 1/32" flat..	\$0.36
RS243—4"x1/4" Dia. x 3/32" flat..	.36
RS244—4"x3/16" Dia. x 1/64" flat..	.36
RS245—For auto radio controls.	
Slotted	.42
RS246—For auto radio controls.	
Tongue	.42

"D-N LIST"

UNIVERSAL "LINEAR" CONTROLS

Prices do not include switch or accessories

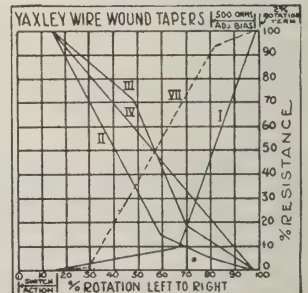
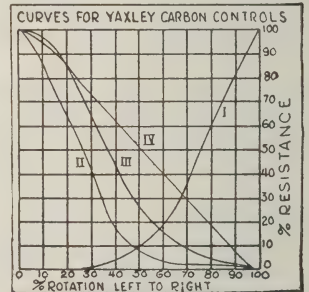
Catalog No.	Type	Ohms	Taper
A400P.....	WW	400.....	Linear..
A550P.....	WW	550.....	Linear..
A1MP.....	WW	1M.....	Linear..
A2MP*.....	WW	2M.....	Linear..
A3MP*.....	WW	3M.....	Linear..
A5MP*.....	WW	5M.....	Linear..
Y5MP.....	Carbon	5M.....	Linear..
A10MP*.....	WW	10M.....	Linear..
Y10MP.....	Carbon	10M.....	Linear..
A20MP*.....	WW	20M.....	Linear..
Y25MP.....	Carbon	25M.....	Linear..
Y50MP.....	Carbon	50M.....	Linear..
Y100MP.....	Carbon	100M.....	Linear..
Y200MP.....	Carbon	200M.....	Linear..
Y250MP.....	Carbon	250M.....	Linear..
Y500MP.....	Carbon	500M.....	Linear..
Y1,000MP.....	Carbon	1 Meg.....	Linear..

*Has exclusive Yaxley adjustable bias feature.

WW—Wire Wound.

List price. **\$1.20**

Each



VOLUME CONTROL WRENCH

No. 178. Each

HEX. SHOULDER NUTS

No. 11260—2 for 3/4" panels.....\$0.24
No. 11261—12 for 1/2" panels......18

LEW BONN CO.
prides itself on having one of the
**LARGEST VOLUME CON-
TROL STOCKS
IN THE WORLD.
ALWAYS OVER 3,000
VOLUME CONTROLS**
in our stock!

You can depend on that famous
"Day's Quicker Service"!

New ELECTRAD CARBON VOLUME CONTROL

Carbon resistance element permanently fused to the flat outer rim of a strong Bakelite ring.

Long aluminum shaft easily sawed or filed to desired length. Saves time and labor.

Mechanism provides 300-degrees of continuous rotation in a straight path.

Long bronze tension spring. Special-alloy floating contact travels end-wise without chattering.

Standard metal cover held by one screw. Instantly interchangeable with power switch assembly.

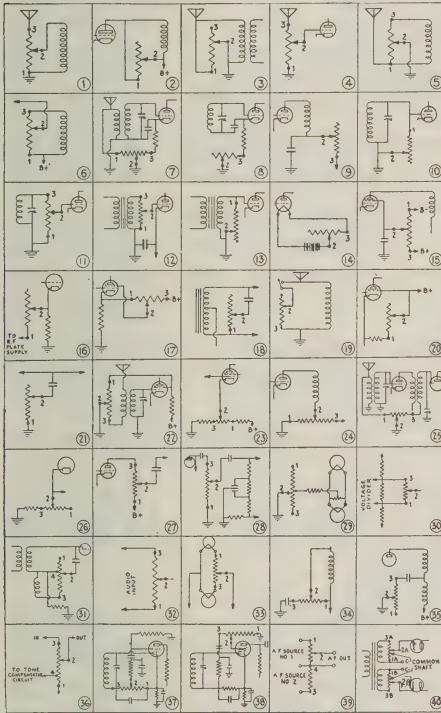
New-type power switch assembly (approved by underwriters) interchangeable with standard cover.

Molded Bakelite case protects mechanism and resistance element from dust and moisture.

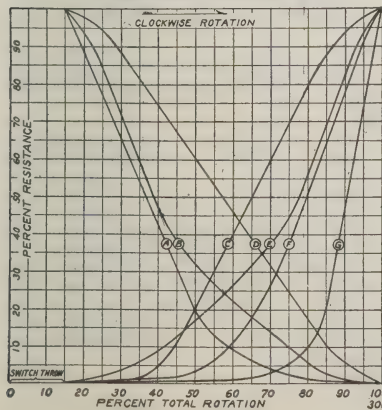
Body of control extends only 1/2" back-panel, when mounted. Case only 1 7/16" wide.

SMOOTH • • QUIET • • LONG-LIVED

VOLUME AND TONE CONTROL CIRCUITS



TAPER CHART



Electrad T Pad Attenuator



Part No.	Line	Impedance	Resistance
TN15	—	15 ohms	15 ohms
TN50	—	50 ohms	50 ohms
TN200	—	200 ohms	200 ohms
TN500	—	500 ohms	500 ohms
TN3000	—	3,000 ohms	3,000 ohms
TN5000	—	5,000 ohms	5,000 ohms

List price, each, \$4.20

Electrad L Pad Attenuator



Part No.	Line	Impedance	Resistance
LN15	—	15 ohms	15 ohms
LN200	—	200 ohms	200 ohms
LN500	—	500 ohms	500 ohms
LN3000	—	3,000 ohms	3,000 ohms
LN5000	—	5,000 ohms	5,000 ohms

List price, each, \$3.00

"D-N LIST"

NEW!

NEW!

ELECTRAD

Carbon Volume Controls

Be Wise—Make It

ELECTRAD

On Your Next Order

New! Utilizes a perfected graphite resistance element baked at high temperature on a solid bakelite ring. Impervious to humidity. Self-wiping contact shoe. Smooth and quiet always. Molded bakelite case 1-7/16 in. in diameter, 1/4 in. thick with metal end cover and long 1/4 in. diameter shaft. All controls indicated with "W" are wire wound.

All standard controls have insulated shafts.

NEW ELECTRAD STANDARD REPLACEMENT CONTROLS

Part No.	Used in Circuit No.	Taper	Total Resistance in Ohms
204W	—14	D	10
269W	—14	D	20
270W	—14	D	30
271W	—14, 23	D	50
272W	—14, 23	D	100
273W	—8, 23	D	200
274W	—8, 23	D	400
991W	—8, 23	D	500
282W	—8, 23	D	600
275W	—8, 23	D	800
276W	—2, 23	D	1,000
992W	—8, 15, 23	D	1,500
232W	—1, 4, 8, 15, 23	D	2,000
233W	—7, 8, 15	D	3,000
277W	—7, 8, 15, 23	D	4,000
234W	—7, 15, 23	D	5,000
278	—4, 7	E	5,000
993W	—4, 7	D	6,000
994W	—4, 7	D	7,500
560	—4, 7	E	7,500
283	—15, 23	D	10,000
995W	—15, 23	D	10,000
240	—7	C	10,000
573	—8	B	12,000
201	—1, 2, 3, 4, 5, 6, 7	C	15,000
279	—15	D	25,000
280	—21	E	25,000
241	—21	F	30,000
997	—8, 9, 21	B	40,000
205	—15	D	50,000
202	—8, 9	A	75,000
242	—12, 13, 18	E	100,000
281	—12, 18	D	200,000
998	—9, 18, 21, 35	A	250,000
208	—11, 12, 13, 18	E	250,000
203	—10, 11, 12, 13	E	500,000
894	—36	E	500,000

Tapped at 62,500

206	—12, 18	E	1,000,000
895	—36	E	1,000,000

Tapped at 125,000

999	—18, 21, 28, 32	E	2,000,000
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All Electrad Standard Controls

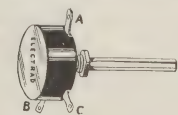
List price, \$1.20

SNAP-ON AC SWITCHES

New type of power switch which is attached by a single screw.

Single pole, single throw, No. 101...\$0.60
Single pole, double throw, No. 102... .72
Double pole, single throw, No. 103... .72

ELECTRAD TYPE U ATTENUATOR



Part No.	Line	Impedance	Resistance
U 500	—	500 ohms	500 ohms
U 4000	—	4,000 ohms	4,000 ohms
U10000	—	10,000 ohms	10,000 ohms

List price, each, \$2.40

We also carry in stock the Electrad Tap Switch Type T Pads—non-inductive. Carry 8 watts. In all standard sizes.

Type 8AT—List price, each, \$15.00

BONN REPLACEMENT VOLUME

Manufacturer and Set Models	Electrad No.	Electrad List	Yaxley No.	Yaxley List	Centralab No.	Centralab List	Manufacturer and Set Models	Electrad No.	Electrad List	Yaxley No.	Yaxley List	Centralab No.	Centralab List
ALL AM. MOHAWK LYRIC-WURLITZER	RI						ERLA Cont.						
S6, S7, S8	283*	\$1.20	G*	\$1.20	72-114*	\$1.20	35, KY66, RE76, RES7, RESS, RE89	208AS*	\$1.80	GE	\$3.00	62-116*	\$1.80
3D, 11D, 19D, 29D, 29H, 34D, 34H, 69D, B1904, D, H	1802T	3.00	DPP169	3.00	74-601	3.00	210, 225, 271A	1714TP	3.60			75-506	3.60
B7, B34	479T	3.00	GG	3.00			81, 85, 245, 257	206*	1.20			52-205*	1.20
C7, B34	240*	1.20	G*	1.20	72-114*	1.20	EVERADY	1747	1.80	SRP179	1.80	72-104*	1.80
39, 40, 41, 712, 722	279*	1.20	J*	1.20	72-111*	1.20	1, 2, 3	282*	1.20	A550P*	1.20	72-107*	1.20
S40, U55, S63, S80	201*	1.20	Y*	1.20	62-119*	1.80	Series 30 and 40	202*	1.20			70-202*	1.20
SW8, S10, SA65, SW80, SA90, 91, SA110, SA130, K	203*	1.20	N*	1.20	62-105*	1.80	Series 50	478T	3.00	DRP242	3.00	74-503	3.00
S50, DC65	560*	1.20	F*	1.20	52-205*	1.80	FADA						
36, 62, 65, 66, 77, 80, 83, 84, 85, 86, 88, 89, 280	166	1.80	SRP170	1.20	72-116*	1.20	7AC, 10, 10Z, 11, 11Z, 30, 30Z, 31, 31Z, 45/72, 50, 70, 71, 72, 475WA, 475 CA	147	1.80	SRP256	1.80	70-017	1.80
70, 73, 75	1907	1.80					15M, 15MZ, 20, 20Z, 25, 25Z, 75, 77	325	1.80	SRP257	1.80	79-019	1.80
90, 93, 94, 95, 96, 714, 742	2052	1.80	G*	1.20	70-501	3.00	35, 35Z, 35Z	277	1.80	SRP256	1.80	72-001	1.80
APEX—See U. S. Radio & Tel.							35C, 40AC	2048	1.80	D*	1.20	72-168	1.80
ATWATER KENT							41, 42, 44, 46, 47	2051T	3.00	O*	1.20	74-513	3.00
37, 38, 40, 41, 42, 43, 44, 46, 47, 51, 52, 53	1738	.60	SRP239	.60	72-105*	1.20	43, 76Z, FK, KG	206*	1.20	O*	1.20	72-116*	1.20
33, 59 all types, 424, 534, 816	278AS*	1.80			70-204*	1.20	45, 45KU, 51, 53, 57, KX61, 66, 66KX, 171, 173	633T	3.00	DRP119	3.00	74-541	3.00
55, 55C, 55F, 56, 57, 60, 61, 61C, 66, All Early Models	1742	.60	SRP241	.60			48, 49, 51KQ, 86KB	283*	1.20	F*	1.20	62-114*	1.80
55, 55C, 55F, 56, 57, All Late Models	524T	3.00	GE	3.00			RP62UA, RP62UA, RP65CA, RP65UA, 262CA, 262UA	203*	1.20	N*	1.20	62-105*	1.80
60	2106T	3.00					265CA, 265UA	60	1.80	G*	1.20		
67 Bat, 67C, 67C, 85Q	242*	1.20	L*	1.20			78RC, 79RC	1848T	3.00				
70, 74, 76, 76Q, D, F, L1, L2, P	1-T	3.00	CE	3.00	4010902	3.00	78/10, 79/10, 133, 134, 135, RW	822P	2.40	O*	1.20	62-116*	1.80
72, H1, H2	1757T	3.00	LM	3.00	25-426	3.00	73, 74, 76, 79, 83, 85, 88, 89, KY	206AS*	1.80	O*	1.20	62-116*	1.80
80, 80F, 83, 83F, 90, 90F	460P	2.40	E*	1.20	2011905	2.00	RA, AC, RE	203*	1.20	R*	1.20		
82, 82F, 85, 85F	433P	2.40	A550P	1.20	62-118*	1.80	FRESHMAN						
84 Early, 84D, 84F, 84Q, 89P, 92, 92F, 96, 96F, 99, 99F, 99F	203AS*	1.80	N, S*	1.80	62-105*	1.80	Masterpiece	204*	1.20	R*	1.20		
145, 155, 160Q, 185, 188, 188F	462PG	2.40	SRP254	1.80	62-111*	1.80	G60, H, K, L, M, S	203*	1.20	M*	1.20	72-105*	1.20
206, 228D, 228F, 236, 246, 260, 266, 325, 376, 387, 425, 427Q, 448, 460, 467, 469, 480, 525, 555, 559, 588, 612, 627, 665, 666, 788, 808, 812, 926	462PG	2.40	A550P	1.20	62-111*	1.80	GENERAL ELECTRIC	381G	1.80	A5MP*	1.20	72-105*	1.20
84	277*	1.20	SRP254	1.80	72-109*	1.20	S22, S22X, H31, H51, H71	383G	1.80	SRP134	1.80	72-105*	1.20
86	233*	1.20	SRP254	1.80	62-109*	1.20	S42	385	1.80	SRP153	1.80	72-109*	1.20
87	953P	2.40	N, S*	1.80	62-105*	1.80	K62, J80, K82, J85, S132						
94, 94F	593	1.20	N, S*	1.80	62-110*	1.80	GENERAL MOTORS						
165, 217, 275, 310, 427D, 510, 667, 708, 711, 808A	202*	1.20	G*	1.20	52-205*	1.80	S1A, S1B, 216, 217, 219, 250	111P	2.40	K, S*	1.80	62-103*	1.80
636, 756	240*	1.20	G, S*	1.20	52-205*	1.80	S2A, S2B, S3B, 251, 252, 253, 254, 255, 256, 257, 258	156P	2.40	G, S*	1.80	62-114*	1.80
567, 567F	206*	1.20	O, S*	1.80	62-103*	1.80	S4A, 140B	132P	2.40	G, S*	1.80	52-011	2.00
BELMONT	203AS*	1.80	N, S*	1.80	62-105*	1.80	120A, 120B, 130A, 130B, 140A, 140B, 1001, A	567T	3.00	SRP270	1.80	74-535	3.00
40 Series, 50 Series, 70 Series, 425, 430	493P	2.40	G, S*	1.80	62-114*	1.80	MA, MB	1387	1.80			72-114*	1.20
60 Series, 47, 48, 50B	409P	2.40	G*	1.20	52-205*	1.80	GRAYBAR ELECTRIC						
50C, 50D, G60, 200	240*	1.20	G*	1.20	52-205*	1.80	8	382	1.80	Y*	1.20	72-119*	1.20
Series 70A, 71C, 100	206AS*	1.80	O, S*	1.80	62-103*	1.80	700, 770, 900	383G	1.80	A5MP*	1.20	72-105*	1.20
71, 110	203AS*	1.80	N, S*	1.80	62-105*	1.80	A, H, GREBE & CO.	381G	1.80	SRP144	1.80	72-100*	1.20
530, 550, 600, 625, 660, 670	493P	2.40	G, S*	1.80	62-114*	1.80	H51, H52, H53, H54-1, H54-2, H54-3, 89						
4, 7, 7A, 7C, 20, 20J, 20K, 20L, 31, 32, 36, 37, 73, 74, 133, 135, 236, 327, 305A	409P	2.40	G*	1.20	52-205*	1.80	AC6, AC7, 428	234AS*	1.80	E, S*	1.80	62-110*	1.80
5A, 200, 201, 205, 206, 210, 211, 5	240*	1.20	G*	1.20	72-114*	1.20	H56, H57, H58, 111B	233*	1.20	N, S*	1.80	70-204*	1.20
20, 46, 58, 60, 63, 96, 107, 115, 126, 136, 146, 166, 176, 242, 243, 250, 312, 313	203*	1.20	N, S*	1.20	72-105*	1.20	GRUNOW RADIO	203AS*	1.80	N, S*	1.80	62-105*	1.80
40, 41, 251, 550, 355, 360, 370	492P	2.40	N, S*	1.80	62-105*	1.80	8A, 500, 801	2091P	2.40	TRP610	1.80	62-116*	1.80
28, 29	1832T	1.80	SRP179	1.80	72-207	1.80	11A, 1151, 1152	206AS	1.80	O, S*	1.80		
48, 49, 54	495	1.80	N*	1.20	72-166	1.80	501, 750	894	1.20	N*	1.20	62-105*	1.80
61, 63	494	1.80	J*	1.20	70-018	1.80	1101	999	1.20	P*	1.20	72-132*	1.20
80, 84	RI						JACKSON BELL						
BREMER TULLY	202AS*	1.80			52-206*	1.80	250, 60, 87, 88, 89A, 96	240*	1.20	G*	1.20		
14, 21, 31							25A, 25U	240AS*	1.80	G, S*	1.80	62-113*	1.80
BRUNSWICK	202*	1.20	J*	1.20	52206*	1.80	24, 27, 28, 547	573AS*	1.80	G, S*	1.80	52-205*	1.80
14, 21, 31, 81, 821	203*	1.20			72-105*	1.20	26, 51	201*	1.20	G*	1.20	79-006*	1.80
17, 24, 25, D	424P	2.40	A3MP*	1.20	62-108*	1.80	62, 63, 64	233*	1.20	D*	1.20	62-108*	1.80
814, 821, 831, 881, 882							5A, 845, S	C32*	1.20	C*	1.20		
CLARION							JESSE FRENCH						
See Trans. Corp. of Am.							H, Midget	1714TP	3.60	GE	3.00	75-507	3.60
CROSLLEY							G, J	1745TP	3.60	DRP119	3.00		
704, 706, Showbox	1712	1.80	SRP185	1.80	51-037	1.80	KENNEDY						
41, 41A, 42, 2nd	1725	1.80	SRP185	1.80	51-037	1.80	10, 12, 14, 20, AC, SG	283*	1.20	G*	1.20	72-114*	1.20
602, 2nd 704, Jewell Box	202*	1.20	T*	1.20	70-202*	1.20	26, 36, 38, 40, 526, 826	479T	3.00	GK	3.00	74-602	3.00
26, 52	504	1.80	L*	1.20	72-045	1.80	32, 34, 42, 44, 48, 50	240*	1.20	G*	1.20	72-114*	1.20
27, 28	686	1.80	SRP263	1.80	72-019	1.80	52, 52A	450G	1.80	G*	1.20	62-117*	1.80
53, 54, 57, 58	1687	1.80	SRP263	1.80	72-111*	1.80	62A, 66, 66A, 66B	2033	1.80	N*	1.20	62-105*	1.80
908, 918, 358, 63	1717	1.80	SRP188	1.80	72-019	1.80	KOLSTER						
184, 408, 428, 71A	587	1.80	SRP263	1.80	70-503	3.00	15, 16, K20, K21, 22, K23, K24, K25, K27, K28, K30, K32, 37, K42, K70, K72, K80, K82, K90, K92, 950, 961	201*	1.20	Y*	1.20	72-102*	1.20
408, 413, 458	592G	1.80	SRP263	1.80	79-006*	1.20	A1, 12, 24, O5, O7, 11, 940	280*	1.20			72-102*	1.20
48, 59, 71	240*	1.20	G7*	1.20	72-105*	1.20	C1, C2, CA, CB, CC, 7, 205, 930	203*	1.20	A5MP*	1.20	62-116*	1.20
120	2086P	2.40	SRP264	1.80	72-105*	1.20	31, 33, K60, K62	234*	1.20	DRP244	3.00	76-006	3.00
124, 125	616P	2.40	E7*	1.20	2111905	2.40	K43, K44	670T	3.00				
127	282*	1.20	SRP264	1.80	72-121*	1.20	K110, K112, K113, K120 to K143	614P	2.40	N, S*	1.80	62-105*	1.80
128, 131	232*	1.20	SRP266	1.80	72-121*	1.20	MAJESTIC	440PG	2.40	H, S*	1.80	55-010	2.40
129, 133, 141, 146, 147, 148, 167	278*	1.20	E7*	1.20	62-110*	1.80	15, 15B, 151, 153, 154, 155, 156	1513PG	2.40	A5MP*	1.20	2011908	2.40
132, 136	950T	3.00	DRP232	3.00	62-105*	1.80	30, 31	1741TP	3.60	DRP122	3.00	75-537	3.60
163, 166, 172, 176	234*	1.20	E7*	1.20	62-110*	1.80	44, Chassis 440, 194	900PG	2.40	F, S*	1.80	2111037	2.40
EARL							50, 51, 52	1810T	3.00	DRP122	3.00	74-523	3.00
31, 32, 41	1748T	3.00	DRP240	3.00	25-416	3.00	55, Chassis 500, 59, 75, 85, 86, 195, 560, 666, 998 Chassis 800	901P	2.40	H, S*	1.80	2012901	2.40
318, 328, 338, 315, 371	202*	1.20	K*	1.20	72-202*	1.20	25B, 35	444PG	2.40	F, S*	1.80	55-014	2.40
ECHOPHONE	1833TG	3.00			74-506	3.00	60, 61, 62, 160, 163	278AS*	1.80	SRP223	1.80	72-073	1.80
S3, S4	232*	1.20	C*	1.20	62-119*	1.80	67, 68, 69, 196, 460, 461, 463, 666, Chassis 460, 776, 886, Century Six, Master Six, Park Ave., Rio, Lido, Riviera	441	1.80				
5, 10, 14, 15, 16, 17, 18, 20, 35, 36, 51	203*	1.20	N*	1.20	62-105*	1.80	70, 70Z, 71, 72, 80	889	1.80	M*	1.20	1010962	1.80
4, 80, 40, 44, 50, 55, 60, 80, 90, E, F	201*	1.20	Y*	1.20	72-119*	1.20							

CONTROL GUIDE... Electrad—Yaxley—Centralab

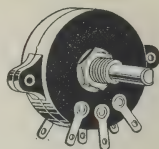
Manufacturer and Set Models	No.	Electrad List	No.	Yaxley List	No.	Centralab List	Manufacturer and Set Models	No.	Electrad List	No.	Yaxley List	No.	Centralab List
MONTGOMERY WARD Cont.							SPARTAN Cont.						
WG24, 62020, 6229, 811, 811X, 111, 1111X.	573	\$1.20			99-006*	\$1.80	27A, 28.	2092G	\$1.80	G*	\$1.20	62-114*	\$1.80
26W, 27W, Cavalier, Commander 62-3, 62-6, 62-7, 62-S, 62-9, 62-10A.	677	1.80	G*	1.20	62-114*	1.80	31, 55.	206*	1.20			72-116*	1.20
62-21, 62-22, 62-29, 62-30, 1932 Auto.	573AS*	1.80	H, S*	1.80	99-006	1.80	33A, 33B, 62, Triolian	2039P	2.40				
62-38, 62-40, 62-50, 62-9, 62-93, 1935, 1955, Fantasy, Rectal Solo.	203*	1.20	N*	1.20	72-105*	1.20	34, 40.	694	1.80	M*	1.20		
62-89, 62-103, 62-105.	206*	1.20	O*	1.20	72-116*	1.20	71, 71B, 72, 78.	2017P	2.40	M, S*	1.80	62-121*	1.80
62-96, 62-98.	206AS*	1.80	O, S*	1.80	62-116*	1.80	81, 82.	2019	1.80	M*	1.20	72-121*	1.20
62-97, 62-97X, 62-99, 62-99X.	240AS*	1.80	G, S*	1.80	62-113*	1.80	89A, 103, 11A, 564, 570, 574.	2016	1.80	Y*	1.20	72-102*	1.20
62-101, 62-101X, 87.	203AS*	1.20	N, S*	1.80	62-105*	1.80	589, 600, 610, 620, 737, 740.						
2822, 2827, 2895, 2897.	274*	1.20	A400P*	1.20	72-118*	1.20	750, 870.	655	1.80	SRP154	1.80	1010964	1.80
181-87.	278*	1.20	D*	1.20			75, 475, 478.	2038	1.80	M*	1.20		
MOTOROLA							410, 420, 430, 600A, 610A, 620A, 750D.	1717TP	3.60	DRP246	3.00	75-543	3.60
5, 5T71, 6T12.	202*	1.20	M*	1.20			STEINITE						
86, 44, 77.	959P	2.40					15, 16, 26, 40, 40C, 50, 50C, 70.						
S10.	958P	2.40	N*	1.20			80, 90, 95, 102, 102C, 210, 230, 412, 420, 421, 423, 425, 450.	202*	1.20	Z*	1.20	70-202*	1.20
PHILCO							220 to 993.						
2, 3, 4 Auto Sets.	2082	1.80	O*	1.20	72-106*	1.20	990, 203, 261, 262, 600, 605.	240*	1.20	G12*	1.20	99-006*	1.80
5, 581, 641, 551, 551A, 561, 571, 581.	1664	1.80	G*	1.20	24-016	1.20	630, 635, 642, 643.	277*	1.20	D*	1.20		
Transstone 7, 15-28X, 47DC, 70 Late, 90, 91 Series, 211, 211A, 490.	203*	1.20	N*	1.20	1210907	1.80	642B, 700, 701, 705, 706, 725.						
16, 17.	2076P	2.40	TRP604	1.80	2211900	2.40	STERLING						
18, 17.	834P	2.40	TRP605	1.80			3A, 4.	240*	1.20	G12*	1.20	44-059	2.40
19.	914	1.80	TRP604	1.80	1210906	1.80	F.	1745TP	3.60	DRP119	3.00	75-507	3.60
20A, 20, 21, 41DC, 42DC, 77, 77A, 220, 220A.	1735T	3.00	DRP114	3.00	74-579	3.00	E.	1817TP	3.60				
28, 29, 45.	2083P	2.40	TRP605	1.80	2211901	2.40	STEWART WARNER						
30 Bat., 96, 96A, 111, 111A, 112, 112A, 112B, 212, 212A, 212E, 296, 296A.	479	1.80	N*	1.20	72-177	1.80	R100A, R100B, R100E, 950AC.	293	1.80	SRP245	1.80	30-010	1.80
35, 36 Bat.	975T	3.00	CE	3.00	4010907	3.00	R100C, 950 Bat., 970, 980.	1759P	3.00			74-602	3.00
38, 38A Bat.	279*	1.20	Y*	1.20	1010980	1.80	R101A, R101B.	240*	1.20	E7*	1.20	72-113*	1.20
43, 44, 54, 118, 504.	203AS*	1.80	N, S*	1.80	2021907	2.40	R102A, R103B, 102E, 801.	201*	1.20	G7*	1.20	72-114*	1.20
50, 50A.	1823T	3.00	CE	3.00	74-559	3.00	R104A, R104B, R104E.	612	1.80	N*	1.20	72-117*	1.20
51, 51A, 52.	832P	2.40	E*	1.20	1010976	1.80	R106A.	611P	2.40	N-S*	1.20		
57.	832P	2.40	Y, S*	1.80	2021904	2.40	108, 108X.	103AS	2.40	N-S*	1.20	62-105*	1.80
60, 261.	835P	2.40	N, S*	1.80	2021905	2.40	Series 109, R110.	682P	2.40	N-S*	1.80	62-106*	1.80
62, 65.	833P	2.40	N, S*	1.80	2021001	2.40	R111, R115, R116, R119.	683P	2.40	N-S*	1.80	62-105*	1.80
62, 65.	233*	1.20	A2MP	1.20	1010978	1.80	300, 305, 310, 315, 320, 325, 340, 345, 350.	274*	1.20	X*	1.20	79-006*	1.20
70, 70A Early, 90 (45's), 90A, 270, 270A, 370, 370A, 470A, 470A, 570, 570A.	1824T	3.00	DRP114	3.00	74-579	3.00	500, 520, 525, 806, 811, 900.	202*	1.20				
71 Sees.	206*	1.20					530, 535.	234*	1.20	E*	1.20	72-110*	1.20
73, 76.	2081	1.80	X*	1.20	1010982	1.80	STROMBERG CARLSON						
80.	2087P	2.40	Y, S*	1.80	2021906	2.40	10, 11, 25, 26.	481	1.80	SRP260	1.80	72-107*	1.20
81.	279AS*	1.80	Y, S*	1.80	1020903	1.80	12, 14, 27.	483	1.80	SRP213	1.80	72-042	1.80
89.	915	1.80	N*	1.20	1020904	1.80	19, 20, 21, 202.	485	1.80				
92, 95.	2079P	2.40	N*	1.20	24-264	1.80	37.	803T	3.00	MM	3.00		
Model N Ford Auto Set.	2079P	2.40			2221904	2.40	38, 39, 40, 610.	1872TP	3.60	MM	3.00	75-545	3.60
C. A. VICTOR							48, 49, 50, 51.	800T	3.00	DRP245	3.00	52-041	2.40
R4, R6, R7A, R9, Superette.	383G	1.80	SRP134	1.80	72-109*	1.20	52, 54.	801T	3.00			62-121*	1.80
R5, R5X.	382	1.80	Y*	1.20			55, 56.	967	1.80	G*	1.20	70-205*	1.20
7-25, 7-54, 17, 41, 50.	401	1.80	SRP145	1.80	72-100*	1.20	Double Shaft, 635AC, 636, 638.	1437	1.80	SRP961	1.80	72-162	1.80
7-8, 7-26X, 18, 33.	402	1.80	SRP144	1.80	72-100*	1.20	Short Shaft, 635, 636.	372	1.80	SRP269	1.80	72-210	1.80
R10, R10, R11, R12, RE18, RE19, R21, RO23, RA26.	385	1.80	SRP153	1.80	1210900	1.80	Long Shaft, 638.	1436	1.80	SRP960	1.80	72-160	1.80
R14, R15, R42, R43.	570T	3.60	DRP116	3.60	74-526	3.00	Double Shaft, 641, 641A, 641B, 641C, 642, 652, 654, 846, 848.	31	1.80	SRP900	1.80	72-159	1.80
R32, RE45, RE52, RE75, RE154, 156.							Double Shaft, 846, 848.	1684	1.80	SRP962	1.80	72-206	1.80
33A.	1706T	3.00	DRP115	3.00	74-600	3.00	TEMPLE					(846, 848 Rear) 72-205, 1.80	
M34, AR5006, M105.	272*	1.20	SRP144	1.80			5-55, 8-61, 8-81, 8-91	1618T	3.00	DRP240	3.00	74-515	3.00
R34, R35, R39, RE57, RE73.	2062P	2.40	SRP251	1.80			8-60, 8-80, 8-90.	201*	1.20	E12*	1.20	70-204*	1.20
35, 39, 51, RA68, 88, 82, 86.	336T	2.40	DRP250	3.00	74-524	3.00	TRANS. CORP. OF AM. CLARION						
R33, R33A, 120, 124, 331.	2063	1.80	TRP607	1.80	72-109*	1.20	25-60, 51, 53, 55, 60.	205*	1.20	Y*	1.20	51-005	1.80
44, 46, 47.	403	1.80	SRP142	1.80	72-108*	1.20	26-94, 90 to 95.	274*	1.20	A400P	1.20	62-118*	1.80
57.	725T	3.00			72-103*	1.20	40, 100, 220.	277*	1.20	ASMP	1.20	55-004	2.40
60, 62.	404	1.80	SRP138	1.80	72-118*	1.20	61, 70.	573*	1.20	H-12*	1.20	79-006*	1.20
64, 67.	405	1.80	SRP141	1.80			80, 81, 84, 85, 120, 121.	277*	1.20	G*	1.20	72-114*	1.20
RAE59, RAE79.	413	1.80	K*	1.20			160, 1340.	276*	1.20	A10MP*	1.20	62-107*	1.80
R90, 260, 261, 280.	2065P	2.40	E*	1.20	72-110*	1.20	240, 240.	784P	2.40	UC503*	1.20	72-105*	1.20
100, 101.	2067P	2.40	TRP603	1.80	1210901	1.80	280, 490.	789	1.80	UC503*	1.20	72-105*	1.20
RC106, 140, 141, 240.	916	1.80	D, S*	1.80	62-108*	1.80	U. APEX RADIO AND TEL.						
110, 111, 115.	2075PG	2.40	TRP603	1.80	1210901	1.80	8, 10.	206*	1.20	O*	1.20	72-116*	1.20
121, 122, 221.	917	1.80	D, S*	1.80	62-108*	1.80	20, 26, 29, 30, 31, 32, 33, 49, 99.	565*	1.20	G12*	1.20	79-006*	1.20
210, 310.	2061PG	2.40	D, S*	1.80	62-108*	1.80	26P.	677	1.80	G12*	1.20	72-113*	1.20
220, 222.	918	1.80					27.	276*	1.20	UC500*	1.20		
260, 261, 280.	2066P	2.40	Y5MP*	1.20	72-110*	1.20	28, 32, 41 to 48.	678P	2.40	G-12S*	1.80	99-006*	1.80
SEARS ROEBUCK							36, 37, 50, 60, 80, 90.	274*	1.20	A400P*	1.20	72-118*	1.20
111, 1370, 1390, 1400, 1402, 1404, 1406, 1430, 2400, J.	573*	1.20	H*	1.20	99-006*	1.80	280, 490.	201*	1.20			70-204*	1.20
501, 502.	201	1.20					WELLS GARDNER						
1580, 1582, 1584, 1590, 1592.	573AS*	1.80	M, S*	1.80	72-115*	1.20	13, 80A.	202*	1.20	D*	1.20	55-005	2.40
1703, 7064.	930P	2.40	M, S*	1.80	99-006*	1.80	20A, 30A.	780	1.80	N*	1.20	72-105*	1.20
1740, 1706.	233AS*	1.80	D, S*	1.80	62-131*	1.80	22A, 32A, 42A, 108.	779P	2.40				
1706, 1706, 1707, 7070, 7071.							C. CG.	232*	1.20			74-509	3.00
7072.	929P	2.40	N, S*	1.80	62-108*	1.80	WEESINGHOUSE						
1705.	925TP	3.60	A550PS*	1.80	62-105*	1.80	WR5, WR6, WR7, WR8.	381G	1.80			72-109*	1.80
1708, 1709, 1720, 1725, 7065.	926T	3.00	N, S*	1.80	1210901	1.80	WR10, 10A.	383G	1.80			72-109*	1.80
1710.	931	1.80	U*	1.20	72-105*	1.20	WR15.	385	1.80			1210900	1.80
1711, 7079.	933	1.80					ZENITH						
1721, 1722, 1732.	932	1.80					10, 70, 71, 72, 73, 77, 82, 89, 102, 122, 712, 722, 732, 772, 822, 832, 842, 842P.	1434TP	3.60	SRP261	1.80	75-614	3.60
7073 to 7078, 7091 to 7094.	924T	3.00					11 to 17, 27, 33 to 42, 55, 333, 342, 352, 353, 362, 422.	771P	2.40	L, S*	1.80		
FF, K.	927P	2.40	N, S*	1.80	62-105*	1.80	57, 60, 61, 62, 64, 67, 70 early, 212, 522, 532, 542, 602, 613, 622, 642, 672.	205P	2.40	SRP261	1.80	62-042	2.40
H, Mentor.	201*	1.20	G, 12*	1.20			80, 2004, BH, LH, WH.	205*	2.40	L*	1.20	72-103*	1.20
SENTINEL	1812TP	3.60	G, 12*	1.20			91, 92.	706P	2.40	ASMP*	1.80		
80, 29, 30, 5000, 5100.	573*	1.20	H, 12*	1.20	79-006*	1.20	230, 240, 245, 474, 475, 701, 705, 706, 707, 711, 712, 715, 750, 755, 756, 760, 765, 767, 2052, 2054, 2059.						
10, 13, 14, 50, 570, 599.	201AS*	1.80	G, 12S*	1.80	62-115*	1.80	250, 2022, 2024, 2018.	203AS*	1.80	N, S*	1.80	62-105*	1.80
104, 56													

* Standard Control. AS and S indicate the use of a Switch Plate which is included in the price shown.
N. B. The use of exact duplicate Volume Controls is recommended for best performance. If an * does not appear after the Part Number it is a special exact duplicate part.

Centralab Controls for Sound Projection

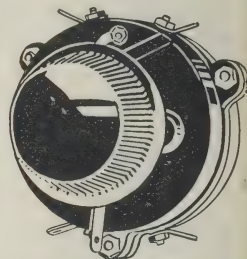
CONSTANT RESISTANCE ATTENUATORS

"T" Pad, Fader and 10 watt "L" Pad in dust tight bakelite case illustrated at right. Size $3\frac{1}{2} \times 1\frac{3}{4}$ inches deep. Single or three-hole mounting. 1 watt "L" Pad in bakelite case illustrated below. Size $1\frac{3}{4} \times \frac{7}{8}$ inches. 25 watt "L" Pad all wire wound with open assembly for heat dissipation. Use Dial Plate No. 60-490 for 1 watt "L" Pads. Use Dial Plate No. 60-489 for all others.



Order by Line Impedance

Impedance Matching Resistance	1 Watt "L" Pad \$3.60 Part No.	4 Watt "L" Pad \$4.80 Part No.	10 Watt "L" Pad \$6.00 Part No.	25 Watt "L" Pad \$6.00 Part No.	"T" Pad \$8.40 Part No.	C. I. Fader \$9.60 Part No.
10,000 Ohms	74-544	96-003	94-006	.....	.....	.....
5,000 Ohms	74-543	96-002	94-006	.....	93-008	83-006
1,500 Ohms	.....	.....	.....	.....	93-001	83-002
500 Ohms	.....	96-007	94-005	.....	93-002	83-003
200 Ohms	.....	96-006	94-004	.....	93-003	83-004
100 Ohms	.....	.....	94-003	.....	93-004	.....
50 Ohms	.....	96-005	94-002	47-209	93-005	83-005
15 Ohms	.....	96-001	94-001	47-208	93-006	.....



Series II Sound Controls



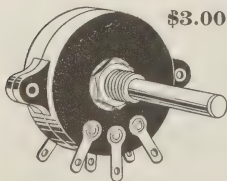
New controls of the finest type for input circuits in broadcast stations, public address systems, and recording apparatus of new or old design. Will prove faultless in the most critical service. Centralab Series II Controls have all resistors of the non-inductive carbon type specially tapered for constant impedance. Attenuation is continuously variable and practically straight line for 45 decibels at all frequencies up to 16,000 cycles. Long life is insured by the patented Centralab non-rubbing contact. This contact NEVER REQUIRES CLEANING. Centralab controls remain noiseless and accurate through years of service.

Electrostatic and electromagnetic shielding provided by a black finished steel case. Bakelite screw type terminal strip on back of case. All resistance elements insulated from shaft and bushing. Single hole mounting. Mounting bushing $\frac{3}{4}$ inch long with two locknuts and lockwashers. Case diameter 2 $\frac{1}{2}$ inches. Depth back of panel "T" Pad, 2 $\frac{1}{2}$ inches; Gain Control, 1 $\frac{1}{2}$ inches. Maximum load dissipation, 1 watt. For detailed information, write for technical booklet.

3-inch black dial calibrated in silver and large pointer knob furnished with control.

	Line Impedance	Resistance	Resistance Each Side of Center	Part Number	Price
"T" PAD ATTENUATOR	500 Ohms	Constant Impedance to Both Input and Output		7-010-852	\$18.00
	200 Ohms			7-010-851	18.00
	50 Ohms			7-010-850	18.00
"T" PAD FADER	500 Ohms	Two Constant Impedance Legs on Both Sides		7-210-852	\$21.60
	200 Ohms			7-210-851	21.60
	50 Ohms			7-210-850	21.60
"L" PAD ATTENUATOR	500 Ohms	Constant Impedance to One Side Only		4-010-852	\$ 8.40
	200 Ohms			4-010-851	8.40
	50 Ohms			4-010-850	8.40
GAIN CONTROL	Attenuation 50 Decibels for Each Control	250M Ohms	————	1-010-852	\$ 6.00
		500M Ohms	————	1-010-851	6.00
		1 Megohm	————	1-010-850	6.00
STRAIGHT FADER	For Crystal or High Impedance Pickups	500,000	1-210-852	\$ 8.40	
		100,000	1-210-851	8.40	
		50,000	1-210-850	8.40	

Twin Replacement Controls



\$3.00	74-601—Back base.....25,000 ohms Shaft base.....10,000 ohms
	74-602—Back base.....50,000 ohms Shaft base.....10,000 ohms

DUAL GRID VOLUME CONTROL

4010805—Both bases....100,000 ohms
4010807—Both bases....250,000 ohms
4010804—Both bases....500,000 ohms

Dial Plate and Knob

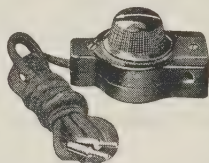
Mounted on the panel with constant impedance or gain controls, these dial plates improve the appearance and provide definite attenuation reference points. Made of heavy brass, silver finish, with etched black lines and numerals. Illustration shows appearance of No. 60-490 dial when mounted on a black panel. Diameter 3 in. Center hole for $\frac{3}{8}$ in. bushing. Furnished for controls having 255 degrees or 325 degrees total rotation. Both types calibrated from 0 to 10.



No. 60-489—Attenuation Dial, 325 degrees rotation\$0.60

No. 60-490—Attenuation Dial, 255 degrees rotation 60

No. 66-487—Black Bakelite Pointer Knob.... .30



Head Phone Modu Plug

Price \$3.00

An attractive small bakelite case and knob housing a variable resistance and clips for attaching head phones. Potentiometer connection to control volume while maintaining constant resistance in the line. Especially adapted to deaf installations in schools, churches, etc., or in hospitals where multiple head sets are used.

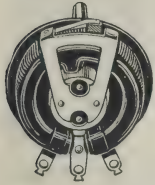
Cord type is similar, but a 30-inch long phone cord replaces the stem.

Cord type 302-029.....	5,000 ohms
Cord type 302-028.....	10,000 ohms
Cord type 302-030.....	20,000 ohms

FREE—Centralab Manual—FREE Series II Sound Projection Controls

If interested in these controls, ask for this 15-page booklet with your next order to Lew Bonn Co. It gives complete information on the New Series II Sound Projection Controls, showing construction, application and many hints of value to you. Complete details.

ELECTRAD Power Rheostats



VITREOUS ENAMELED

Single hole mounting. Insulated shaft. Contact shoe is of special metal graphite applicable for speed controls for motors, voltage controls, etc. Ruggedly designed for long life at rated current loads.

25 WATT RATING (Total Resistance in Circuit)

Part No.	Resist. Max. Current in Ohms in Amperes	Part No.	Resist. Max. Current in Ohms in Amperes
2X-1	1.5	2X-60	.64
2X-1P5	1.5	2X-80	.56
2X-2	2	2X-100	.50
2X-3	3	2X-150	.40
2X-4	4	2X-200	.35
2X-6	6	2X-300	.29
2X-8	8	2X-400	.25
2X-10	10	2X-600	.20
2X-15	15	2X-750	.18
2X-20	20	2X-1000	.16
2X-30	30	2X-1500	.13
2X-40	40	2X-2000	.11

LIST PRICES

Up to 1 ohm.....	\$5.40
Above 1 ohm to 750 ohms.....	4.80
Above 750 ohms to 2,000 ohms.....	5.40

50 WATT RATING (Total Resistance in Circuit)

Part No.	Resist. Max. Current in Ohms in Amperes	Part No.	Resist. Max. Current in Ohms in Amperes
5X-P5	.5	5X-25	1.4
5X-1	1.0	5X-30	1.3
5X-1P5	1.5	5X-40	1.1
5X-2	2	5X-50	1.0
5X-2P5	2.5	5X-75	.81
5X-3	3	5X-100	.70
5X-4	4	5X-150	.58
5X-5	5	5X-200	.50
5X-6	6	5X-300	.41
5X-8	8	5X-500	.31
5X-10	10	5X-800	.25
5X-15	15	5X-1000	.22
5X-20	20		

LIST PRICES

Up to 2 ohms.....	\$6.00
Above 2 ohms to 500 ohms.....	5.40
Above 500 ohms to 1,000 ohms.....	5.70

100 WATT RATING (Total Resistance in Circuit)

Part No.	Resist. Max. Current in Ohms in Amperes	Part No.	Resist. Max. Current in Ohms in Amperes
10X-P5	.5	10X-40	1.6
10X-1	1	10X-60	1.29
10X-1P5	1.5	10X-80	1.12
10X-2	2	10X-100	1.00
10X-3	3	10X-150	.81
10X-4	4	10X-200	.71
10X-6	6	10X-300	.58
10X-8	8	10X-400	.50
10X-10	10	10X-600	.41
10X-15	15	10X-750	.36
10X-20	20	10X-1000	.32
10X-30	30	10X-1500	.26

LIST PRICES

Up to 3 ohms.....	\$9.00
Above 3 ohms to 750 ohms.....	8.40
Above 750 ohms to 1,500 ohms.....	9.00

150 WATT RATING (Total Resistance in Circuit)

Part No.	Resist. Max. Current in Ohms in Amperes	Part No.	Resist. Max. Current in Ohms in Amperes
15X-P5	.5	15X-75	1.4
15X-1	1	15X-100	1.2
15X-1P5	1.5	15X-125	1.1
15X-2	2	15X-150	1.0
15X-2P5	2.5	15X-200	.87
15X-3	3	15X-250	.77
15X-5	5	15X-300	.70
15X-7P5	7.5	15X-500	.55
15X-10	10	15X-750	.45
15X-15	15	15X-1000	.38
15X-25	25	15X-1500	.31
15X-35	35	15X-2000	.27
15X-50	50		

LIST PRICES

Up to 5 ohms.....	\$11.40
Above 5 ohms to 500 ohms.....	10.80
Above 500 ohms to 1,250 ohms.....	11.40
Above 1,250 ohms to 2,000 ohms.....	12.00

LINE CORD RESISTORS FOR AC—DC RADIO SETS.

Replacement for Voltage Resistor Cords in AC-DC sets. Cord has built-in resistor as third wire for reducing line voltage to the correct value for the tube filaments.



STOCK VALUES

Stock No.	Total Voltage Drop in Filaments	Resistance of Cordohm
LC-1	18.0 to 24.0	330 ohms
LC-2	25.0 to 31.5	290 ohms
LC-3	45.0 to 55.5	220 ohms
LC-4	56.5 to 68.9	160 ohms
LC-5	69.0 to 75.2	135 ohms
LC-6	53.0 to 61.0	180 ohms

List price, all types, each, \$0.66

3 for \$1.80

CENTRALAB POWER RHEOSTATS

25 Watt Rheostat

Part No.	Resistance	Price
48-002	2 Ohms	\$2.40
48-006	6 Ohms	2.40
48-015	15 Ohms	2.40
48-050	50 Ohms	2.40
48-150	150 Ohms	2.40
48-400	400 Ohms	2.40
48-810	1,000 Ohms	2.40
48-850	5,000 Ohms	2.40

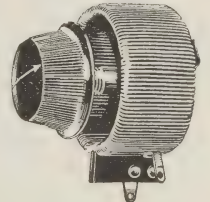
Ideal Rheostats for motor speed controls, charging rate adjusters, soldering iron control, etc. Maximum heat dissipation for size. Practically indestructible.

50 Watt Rheostat

Part No.	Resistance	Price
48-025	25 Ohms	\$3.00
48-060	60 Ohms	3.00
48-151	150 Ohms	3.00
48-501	500 Ohms	3.00
48-811	1,000 Ohms	3.00
48-851	5,000 Ohms	3.00

75 Watt Rheostat

Part No.	Resistance	Price
47-277	50 Ohms	\$3.60
47-278	150 Ohms	3.60
47-279	300 Ohms	3.60
47-280	500 Ohms	3.60
47-281	1,000 Ohms	3.60

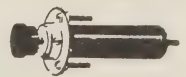


SUPER POWER CLAROSTATS

Purpose	Type	Watts	Volts	Resistance Min.	Resistance Max.	Price
Fil. Range...	CSP-1	250	200	0.25	10	\$5.90
Low Range...	CSP-2	250	300	25	500	5.90
Univ'l Range...	CSP-3	250	500	200	100,000	5.90
Fil. Range...	CP-1	80	200	0.25	10	3.70
Low Range...	CP-2	80	300	25	500	3.70
Univer'l Range...	CP-3	80	500	200	100,000	3.70

These devices are suitable for controlling Gen. Field, Electro Plating, Plate Voltage, Motor Speed, Filaments, Line Voltage, Transmitter Grid Leak, Soldering Iron and Heating Apparatus.

BRADLEY RADIOSTATS



Widely used by radio amateurs for filament controls. Very rugged in construction.

Type ABR500—Resistance 4 to 150 ohms; capacity 500 watts	\$11.00
Type ABR210—Resistance 4 to 150 ohms; capacity 75 watts	6.80

SECURITY

VALUE—PLUS VOLUME CONTROLS

SW-1—Dual, for Victor R32.....	\$1.80
SW-2—Single, for RCA 18-33-51	1.20
SW-3—Dual, for Philco 77-77A-20-20A.....	1.70
SW-4—Dual, for Philco 70-270.....	1.70
SW-5—Dual, for Philco 50-50A	1.75
SW-8—Single, for RCA 17-50-60-62-64-67....	1.20
SW-9—Dual, for RCA 42-48.....	2.10



DURABLE
AS A
BATTLESHIP

QUIET
AS A CAT
ON A PILLOW

RELIABLE
AS THE
NORTHERN STAR

MOISTURE-PROOF
AS A
DUCK'S BACK
and ...

INSULATED

USE THEM ANYWHERE WITH-
OUT DANGER OF SHORTING

One of the smallest radio parts, resistors are likewise one of the most important. That is why IRC has never sacrificed quality to price—why the new IRC INSULATED RESISTORS are the finest obtainable. Servicemen who use them exclusively will be amply repaid in freedom from annoying call-backs, failure, etc. In the long run, they will save you many dollars.

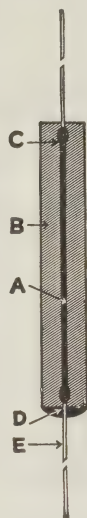
STANDARD STOCK RANGES

Subject to the minimum and maximum values shown for each of the various types of Type "B" Resistors.

50 ohms	1,625 ohms	12,000 ohms	90,000 ohms
100 ohms	1,750 ohms	12,500 ohms	0.1 meg.
150 ohms	1,875 ohms	15,000 ohms	0.125 meg.
200 ohms	2,000 ohms	17,500 ohms	0.15 meg.
250 ohms	2,250 ohms	20,000 ohms	0.2 meg.
300 ohms	2,500 ohms	22,500 ohms	0.25 meg.
350 ohms	2,750 ohms	25,000 ohms	0.3 meg.
400 ohms	3,000 ohms	27,500 ohms	0.4 meg.
450 ohms	3,250 ohms	30,000 ohms	0.5 meg.
500 ohms	3,500 ohms	32,500 ohms	0.6 meg.
600 ohms	4,000 ohms	35,000 ohms	0.75 meg.
700 ohms	4,500 ohms	40,000 ohms	1.0 meg.
750 ohms	5,000 ohms	45,000 ohms	1.5 meg.
800 ohms	6,000 ohms	50,000 ohms	2.0 meg.
900 ohms	7,000 ohms	55,000 ohms	3.0 meg.
1,000 ohms	7,500 ohms	60,000 ohms	4.0 meg.
1,125 ohms	8,000 ohms	65,000 ohms	5.0 meg.
1,250 ohms	9,000 ohms	70,000 ohms	6.0 meg.
1,375 ohms	10,000 ohms	75,000 ohms	7.0 meg.
1,500 ohms	11,000 ohms	80,000 ohms	10.0 meg.

NEW I R C Metallized INSULATED TYPE "B" RESISTORS

The Outstanding Resistance Development in Years



½ Watt (Type B-½)



1 Watt (Type B-1)

Small—light—high voltage insulation that enables you to use them anywhere without fear of shorting—famous Metallized resistance element sealed in moisture-proof insulating material—extreme ruggedness—more effective length of wire leads—outstanding excellence in every important resistor characteristic. . .

That, in short, is the new IRC Type "B" INSULATED Metallized Resistor—the finest, safest, most durable and accurate resistor ever offered to servicemen and amateurs. They last longer—they're noise free, crack-proof and trouble free. Guard your reputation for the finest service work by using these ideal modern resistors on EVERY job!

Type "B" Metallized Resistors are BOTH color coded and individually marked with resistance value and wattage rating.

NOTE THE FEATURES!

A—Famous Metallized resistance principle.

B—Heavy casing of insulating material moulded around Metallized Filament Resistance Element sealing it from moisture and

E—Highly tinned end leads for quick, easy soldering.

protecting it against grounding on other parts.

C—Positive integral contact obtained by bonding wire lead to resistance element.

D—Moisture - proof. Sealed throughout.

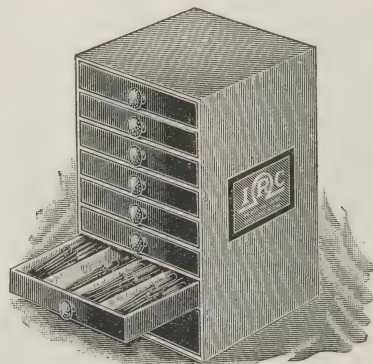
½ Watt. (Type B-½) ½" long x 3/16" diameter. Made in all practical ranges. Stocked in all ranges shown on accompanying list from 100 ohms to 5.0 megohms. Each... **\$0.24**

1 Watt. (Type B-1) 1½" long x ¼" diameter. Made in all practical ranges. Stocked in all ranges shown on accompanying list from 100 ohms to 10.0 megohms. Each..... **\$0.30**

THE I R C RESISTO-CHEST

You Can Get It FREE!

NEW!



Just the Thing for Your Service Bench—Holds Several Hundred Resistors—Has Dozens of Other Uses.

Here you are! An assortment of 56 of the new IRC Insulated Resistors of selected, frequently used ranges—and contained in the handiest most practical form possible—the new IRC RESISTO-CHEST. Chest has seven small drawers, one large drawer, 8½" high, 4¼" wide by 5½" deep. Makes it easy to select desired values—to check your resistor stock—to make sure you ALWAYS have the values you need. Your own list of ranges can be conveniently marked on drawers. Combination includes 56 Type B-1 (1-Watt) Insulated Metallized Resistors (two each of the 28 most popular values). Handy formulas and color code chart are a part of every kit. You pay only the price of the resistors. THE RESISTO-CHEST IS GIVEN FREE!

\$16.50

(Chest sold separately for \$18.00)



2 Watt

I R C
Metallized

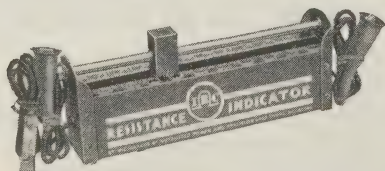
IRC Metallized 2-Watt Resistors carried in all of the sizes listed above.

Type F-2—2-watt Metallized Resistors. Each.....**\$0.36**

IRC DUAL RESISTOR INDICATOR

Fuse Protected

\$5.40



Range from 100 to 100,000 ohms. Metal case, ball-bearing slide; tapered, insulated clips. Range may be extended by using series resistors. The handiest tool of all.

"D-N LIST"

LOWER SURFACE TEMPERATURE

• MOISTURE-PROOF

• NON-POROUS CERAMIC CORE

IRC POWER WIRE WOUND RESISTORS

GREATER LOAD CAPACITY

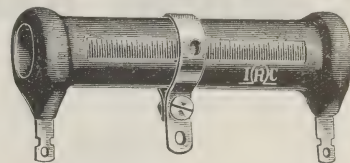
• LONGER LIFE

• GREATER MECHANICAL STRENGTH



Built to stand overloads, intense heat, dampness—we'll guarantee these new IRC CEMENT COATED resistors as the finest Power Units you have ever tried. You will find them by far the coolest, longest-lived power wire wound resistors for every service replacement, amateur transmitting, experimental, broadcasting and industrial use.

IRC ADJUSTABLE POWER WIRE WOUND RESISTORS



TYPE PB			
10 Watts—Fixed			
Size 1 1/4" x 5/16"			
Range	Max. Current	Range	Max. Current
Ohm	m. a.	Ohm	m. a.
1	3,150	1,125	100
2	2,210	1,250	95
3	1,830	1,375	90
5	1,420	1,500	83
7.5	1,150	1,750	75
10	1,000	2,000	71
15	820	2,250	67
20	720	2,500	63
25	640	2,750	60
30	580	3,000	57
40	500	3,500	53
50	440	4,000	50
60	400	4,500	47
75	360	5,000	45
80	340	6,000	41
90	325	7,000	37
100	315	7,500	36
150	260	8,000	35
200	220	8,500	34
250	200	9,000	33
300	175	10,000	31
350	169	11,000	30
400	157	12,000	28
450	148	12,500	28
500	140	15,000	25
600	125	17,500	23
750	115	20,000	22
800	112	22,500	22
900	108	25,000	20

List Price—All Sizes
Each \$0.48

TYPE PG			
100 Watts—Fixed			
6 1/2" long by 1 1/2" diameter			
Mounting Brackets included			
Range	Max. Current	Range	Max. Current
Ohm	m. a.	Ohm	m. a.
100	1,000	1,500	250
250	632	2,000	220
500	447	2,500	200
750	365	3,000	180
1,000	315	5,000	140
1,250	280		
List			\$1.80
7,500	115	20,000	70
10,000	100	25,000	63
15,000	80		
List			\$2.10
30,000	53	50,000	44
40,000	50		
List			\$2.40
60,000	41	75,000	36
List			\$2.70
0.1 meg.	31		
List			\$3.00

TYPE PC			
20 Watts—Fixed			
Size 2" x 9/16"			
Range	Max. Current	Range	Max. Current
Ohm	m. a.	Ohm	m. a.
1	4,400	2,250	94
10	2,000	2,400	91
15	1,415	2,500	89
25	895	2,750	85
50	617	3,500	75
71	500	4,400	70
100	447	4,000	66
150	365	4,500	60
200	316	5,000	63
250	282	6,000	57
300	258	7,000	53
350	238	7,500	51
400	224	8,000	50
450	200	9,000	46
500	163	10,000	43
550	158	11,000	41
600	153	12,000	40
650	141	12,500	39
700	129	15,000	35
750	126	20,000	30
800	115	25,000	28
850	107	30,000	25
900	104	35,000	23
950	100	40,000	22
1,000		50,000	20

List Price

1 to 1,500 ohms.....\$0.78
17,500 to 50,000 ohms.... .90

TYPE PJ			
200 Watts—Fixed			
10 1/2" long by 1 1/2" diameter			
Mounting Brackets included			
Range	Max. Current	Range	Max. Current
Ohm	m. a.	Ohm	m. a.
100	1,414	2,000	316
250	894	2,500	283
500	632	3,000	258
750	515	5,000	200
1,000	447	7,500	163
1,500	365	10,000	141
List			\$3.00
15,000	115	50,000	63
20,000	100	60,000	57
25,000	90	75,000	51
30,000	81	0.1 meg.	44
40,000	70		
List			\$3.60

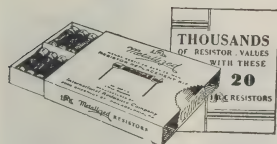
TYPE PXA			
25 Watts—Adjustable			
2 1/2" long by 9/16" diameter			
Extra bands. List .....\$0.12			
Range	Max. Current	Range	Max. Current
Ohm	m. a.	Ohm	m. a.
1	5,000	500	224
5	2,200	750	182
10	1,580	1,000	158
25	1,000	1,250	141
50	719	1,500	129
75	575	2,000	112
100	500	2,500	100
150	409	3,000	91
250	320	4,000	79
400	250	5,000	71
List			\$1.00
6,000	64	12,000	45
7,500	58	15,000	41
10,000	50		
List			\$1.14
20,000	35	25,000	32
List			\$1.30

TYPE PGA			
100 Watts—Adjustable			
6 1/2" x 1 1/2"			
Mtg. Brackets included			
Extra bands. List .....\$0.18			
Range	Max. Current	Range	Max. Current
Ohm	m. a.	Ohm	m. a.
500	447	2,500	200
1,000	315	3,000	180
1,500	250	4,000	155
2,000	220	5,000	140
List			\$2.40
7,500	115	15,000	80
8,000	110	20,000	70
10,000	100	25,000	63
List			\$2.70
30,000	58	50,000	44
40,000	50		
List			\$3.00
60,000	41	0.1 meg.	31
75,000	36		
List			\$3.30

TYPE PEA			
50 Watts—Adjustable			
4 1/2" x 3/4"			
Mtg. Brkts. included			
Extra bands. List .....\$0.12			
Range	Max. Current	Range	Max. Current
Ohm	m. a.	Ohm	m. a.
10	2,230	1,000	215
50	1,000	1,500	175
100	700	2,500	135
250	440	4,000	105
500	300	5,000	95
750	250		
List			\$1.60
6,000	85	12,000	63
7,500	77	15,000	56
8,000	75	20,000	48
10,000	66	25,000	43
List			\$1.80
30,000	39	50,000	30
40,000	34		
List			\$2.00
60,000	28	75,000	25
List			\$2.40

TYPE PJA			
200 Watts—Adjustable			
10 1/2" x 1 1/2"			
Mtg. Brackets included			
Extra bands. List .....\$0.18			
Range	Max. Current	Range	Max. Current
Ohm	m. a.	Ohm	m. a.
500	632	2,500	283
1,000	447	3,000	258
1,500	365	5,000	200
2,000	316	10,000	141
List			\$3.60
15,000	115	50,000	63
20,000	100	60,000	57
25,000	90	75,000	51
30,000	81	0.1 meg.	44
40,000	70		
List			\$4.20

IRC Handy RESISTOR KITS



KIT NO. 1

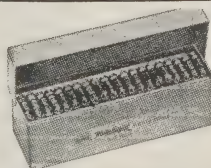
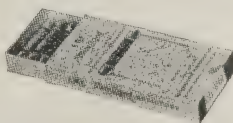
Contains twenty 1-watt resistors ranging from 500 ohms to 3 meg.

\$4.80

KIT NO. 2

Contains twenty 2-watt resistors ranging from 500 ohms to 1 meg.

\$7.20



KIT NO. 3

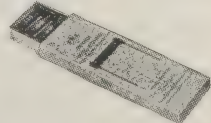
Contains twenty 1/2-watt resistors ranging from 250 ohms to 2 meg.

\$4.80

HANDY GRID BIAS KIT

Contains ten assorted 1-watt, 2-watt and 10-watt resistors; required to bias 24s, 26s, 27s, 71A's, 45s, 47s, 10s, etc.

\$3.10



See **IRC MOTOR SUPPRESSORS**
on Page 33

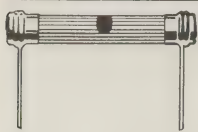
The Wise Serviceman carries a complete stock of IRC resistors!

"D-N LIST"

27

Centralab

CARBON RESISTORS



We guarantee these resistors to be the finest made, in every respect. They are much more accurate and will carry two to three times heavier load than ordinary carbon resistors. Every resistor has its resistance value plainly marked on it in addition to carrying the regular R. M. A. Color Code.

CRL—1½ Watt Resistor, ¼x1¼ in. Each.....\$0.24

We carry every size you may want from 50 ohms to 20 meg (we stock 112 different values). Order by writing CRL and then the resistance value you desire—per example CRL 50,000 will mean one of these resistors in 50,000 ohms.

Service Resistor Assortments—10 Assorted Resistors—1 each: 500,000, 200,000, 100,000, 50,000, 25,000, 10,000, 5,000, 2,000, 1,000, 500.....\$2.40

20 Assorted Resistors—Has above values and 1 each 2 meg, 1 meg, 750,000, 150,000, 40,000, 25,000, 20,000, 15,000, 8,000 and 300.....\$4.80



CENTRALAB HANDY RESISTOR RACK

Keeps your resistor stock in order. Made of heavy sheet steel lacquered finish. Color code chart integral with rack.

Supplied free with order for the following assortment of 40 resistors:

Type 316—250, 500, 750, 1,000, 1,500, 2,500, 4,000, 5,000, 7,500, 10M, 15M, 20M, 25M, 30M, 40M, 50M, 75M, 100M, 150M, 250M ohms.

100, 300, 500, 750, 1M, 100M, 125M, 150M, 250M, 300M, 400M, 500M, 750M ohms, and 1, 1.5, 2, 3, 4, 5 megohms.

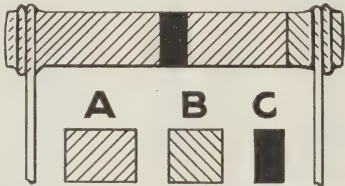
List price of assortment.....\$7.00
Resistor Rack only......90

R. M. A. STANDARD RESISTOR COLOR CODE

The body color (A) represents the first figure of the resistance value. One end (B) is colored to represent the second figure. A band, or dot, (C) of color, represents the number of ciphers (0) following the first two figures.

Fig. Color Fig. Color

0 Black	5 Green
1 Brown	6 Blue
2 Red	7 Violet
3 Orange	8 Grey
4 Yellow	9 White



EXAMPLES OF COLOR CODE

250 ohms.....Red	Green	Brown	12,000 ohms.....Brown	A	B	C
1,000 ohms.....Brown	Black	Red	25,000 ohms.....Red	Green	Orange	Green
3,500 ohms.....Orange	Green	Red	250,000 ohms.....Red	Green	Yellow	Green
10,000 ohms.....Brown	Black	Orange	1.5 Megohms.....Brown	Green	Green	Green

RCA CATHODE RAY OSCILLOGRAPH

For measuring hum and checking distortion in audio amplifiers, monitoring percentage modulation, checking modulated waveform for distortion and examining the phase shift in audio amplifiers. A visual presentation of practically all alternating current circuit functions may be quickly and easily made. Visual alignment of R.F. and I.F. circuits and "flat-topping" of I.F. circuits can be accomplished by using this unit with the Model TMV-128-A RCA Frequency Modulator and RCA TMV-97-C oscillator or any good oscillator equipped with necessary connections.

Specifications:

***Focusing**—Adjustable control on the front panel provides a means of accurately focusing the light beam on the screen.

***Illumination**—The light intensity permits photographs to be easily made with ordinary commercial equipment.

***Sensitivity**—Guaranteed at two volts per inch. Gives large images for small input voltages.

***Sweep Circuit**—A linear saw-tooth oscillator, adjustable from 20 to 15,000 cycles, is provided. A special circuit provides a positive means for synchronizing this oscillator with the voltage under test. External synchronizing voltage source also may be used.

Model TMV-122B.

Complete with All Tubes. Your Net Cost.....

***Amplifiers**—Two wide frequency range amplifiers are provided, one for horizontal and one for vertical deflection. The amplifiers are linear from 20 cycles to 90,000.

***Centering Adjustments**—Two screw-driver adjustments at rear of case for both vertical and horizontal beam centering adjustment.

***Radiotrons Used**—1 RCA-906 (Cathode-Ray Tube 3 inch), 1-879, 1-885, 1-80, 2-57.

***Power Supply**—Complete AC operation from 110-120-volt lines. Power consumption 50 watts. Size: H 12¼ inches, W 7½ inches, 17½ inches. Weight, 35 lbs.

\$84.50

"D-N LIST"

SECURITY CARBON RESISTORS

Made by one of the largest and best known manufacturers of resistors. Each resistor has resistance value plainly marked on it and in addition carries R. M. A. Color Code. Security Resistors are rated at 10% accuracy and actually run within 5%. We guarantee them to satisfy you in every respect. Security Resistors are NOT job-lot resistors.



Size ¼"x1¼".
1 Watt. Each\$0.18
5 for \$0.80 10 for \$1.50 25 for \$3.50
50 for \$6.50

We stock 100 values between 100 ohms and 10 megohms.

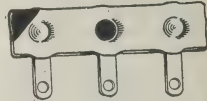
OHMITE WIRE WATT RESISTORS



1 Watt. Size ¼"x1¼". Absolutely noiseless. Accurate. We stock Wirewatts in 42 different resistances, values from 100 ohms to 25,000 ohms.
1 Watt—Wirewatts. Each.....\$0.30

CENTER-TAPPED RESISTORS ELECTRAD

Flat Type—Illustrated.
Size ½"x½"x1½" Type EF
Round Type



Size 1½"x¼"—2" leads. Type ER fully protected with a moisture-proof enamel. Values imprinted and color coded stock resistance values—10, 15, 20, 30, 50, 75, 100, 200 ohms.

Both types. Each\$0.30

RED DEVIL 10 WATT

Center-Tapped Resistors.

Just like regular Red Devils. Stock resistance values—10, 15, 20, 25, 30, 40, 50, 75, 100, 200 ohms.

Type OCT. Each\$0.60

VALUE PLUS BARGAIN

While they last.

Security 1 Watt Center-Tap Resistor. Flat, wire wound medium size. 20 ohms only.

No. SCT-20. Each.....\$0.10

WIRE WOUND RESISTORS

Wire wound. All values from 1 ohm to 1,500 ohms.

Each\$0.30

10 for 2.70

Especially handy in the 1, 2, 3, 4, 5, 6, 7, 8, 9, and 10 ohm values.



RCA OSCILLATOR



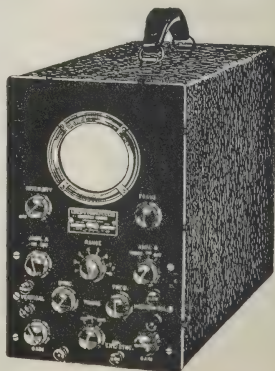
Direct reading dial. Produces eight fundamental frequency ranges as follows: 90 to 150 K. C.; 150 to 330 K. C.; 330 to 720 K. C.; 720 to 1,360 K. C.; 1,460 to 3,050 K. C.; 3,050 to 7,400 K. C.; 7,400 to 14,300 K. C.; 14,300 to 25,000 K. C. Tuning dial, adjustable vernier type calibrated to an accuracy of 3% plus or minus.

Convenient operation with the RCA Oscillograph is provided by a sweep circuit jack incorporated on panel. Ordinary oscillators cannot be used for this purpose without making circuit

alterations.

A plate modulated tuned grid circuit using two type 30 tubes is used. The A. F. modulator tube produces a 400 cycle note, modulating the R. F. oscillator 50%. Two binding posts are employed for the output circuit which is attenuated by a smooth control of the potentiometer type. Batteries required are: one 22½-volt "B" battery and one standard size 4½-volt "C" battery which provides current for the two type 30 tubes in series. Enclosed in a black finished aluminum case provided with a leather carrying handle. Weight, only 5 lbs. including batteries. Size of base, 9¼ in. wide, 4¼ in. deep and height overall, 8½ in. Batteries not included.

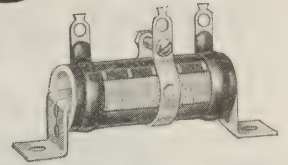
No. 9595—Your Net Cost.....\$34.50



ELECTRAD

VARIOHM

Vitreous Enameled Adjustable RESISTORS



5/8"x2 1/2" TUBE 30 WATTS		5/8"x4 1/2" TUBE 50 WATTS		5/8"x6 1/2" TUBE 80 WATTS		1"x7" TUBE 100 WATTS		1 1/4"x10 1/2" TUBE 200 WATTS	
Ohms	Max. Cur.	Ohms	Max. Cur.	Ohms	Max. Cur.	Ohms	Max. Cur.	Ohms	Max. Cur.
1	5460	5	3300	10	2730	1000	315	500	632
3	3160	10	2340	15	2230	2000	220	1000	447
5	2450	25	1480	25	1730	3000	180	1500	365
10	1730	50	1048	50	1220	4000	155	2000	316
15	1410	75	850	100	865	5000	140	2500	283
25	1090	100	740	250	545	6000	125	3000	258
50	770	150	600	300	500	8000	110	5000	200
75	630	200	520	500	387	10000	100	10000	141
100	545	250	465	750	316	15000	81	20000	100
150	445	500	330	1000	270	20000	70	25000	90
200	385	750	270	1500	223	25000	63	30000	81
250	345	800	260	2000	190	30000	57	35000	75
500	245	1000	234	2500	173	35000	53	50000	63
750	200	1500	190	3500	146	40000	50	60000	57
800	193	2000	165	5000	122	50000	44	70000	53
1000	173	2500	148	7500	100	60000	40	75000	51
1500	141	3000	135	10000	86	75000	36	80000	50
2000	122	4000	117	15000	70	LIST PRICES		100000	44
2500	109	5000	104	20000	61	100 to 5000		150000	20
3000	100	7500	85	25000	55	ohms .....\$2.40		LIST PRICES	
3500	92	8000	82	30000	50	6000 to 25000		100 to 10000	
4000	86	10000	74	35000	47	ohms .....\$2.70		ohms .....\$3.60	
5000	77	12000	67	40000	43	30000 to 50000		10000 to 100000	
6000	70	15000	60	45000	41	ohms .....\$3.00		ohms .....\$4.20	
7500	63	20000	50	50000	39	60000 to 100000		150000	
10000	54	25000	45	60000	35	ohms .....\$3.30		ohms .....\$4.50	
12000	50	30000	43	80000	31				
15000	44	40000	37	100000	27				
20000	38	50000	34						
25000	34								
LIST PRICES		LIST PRICES		LIST PRICES		EXTRA ADJUSTABLE LUGS			
1 to 5,000 ohms..\$1.02		5 to 5,000 ohms..\$1.62		10 to 5,000 ohms \$2.10		Type 3—For 30, 50, 75	Each		
6,000 to 15,000		6,000 to 25,000		6,000 to 25,000		watts		\$0.12	
ohms 1.14		ohms 1.80		ohms 2.40		Type 4—For 100 watts....		.18	
17,500 to 25,000		30,000 to 50,000		30,000 to 50,000		Type 5—For 200 watts....		.18	
ohms 1.32		ohms 2.04		ohms 2.70					
		60,000 to 100,000		60,000 to 100,000					
		ohms 2.40		ohms 3.00					

10 WATT—ADJUSTABLE—TYPE A

Electrad Tru Volt Resistors

Size 1 1/4 x 5/8 inches. We carry in stock all values from 1 ohm to 25,000 ohms. Each.....\$0.60

NEON TATTELITES



Protect meters, transformers, condensers, rectifiers against lightning surges. Effective in locating blown fuses, defective resistors, condensers. **Indicate resonance peaks.** Glow brilliantly when operated. Life range is from 1,000 to 5,000 hours.

Cat. No.	Rating Volts	Price	Description	Ext. Current Series		
				Volts	**DC Resist.	Built in
5076	100	\$1.20	Copy A	85	3	30,000
5077	250	1.20	Copy B	200	8	50,000
5078	500	2.40	Copy C	200	10	30,000
5079	1,000	3.60	Copy D	300	15	50,000
5080	2,000	4.80	Copy E	450	15	120,000

DESCRIPTION

Copy A: For general test purposes. Has blind lead for shorting out built-in resistor. Size 1 1/4 in. by 5/8 in. diameter. 6 in. insulated leads. No sec. electrodes.
 Copy B: For test and protection purposes. Has blind lead for shorting out built-in resistor. Size 2 1/4 in. by 1/2 in. diameter. 4 in. insulated leads; No sec. electrodes.
 Copy C: Protection and circuit applications. Size 5 in. by 1/2 in. diameter. Sec. electrode connected by 6 in. pigtail on ends.
 Copy D: Protection and circuit applications. Size 8 in. by 1/2 in. diameter. Sec. electrode connected by 6 in. pigtail on ends.
 Copy E: Protection and circuit applications. Size 9 in. by 1/2 in. diameter. Sec. electrode connected by 6 in. pigtail on ends.

**AC 100% higher (double).

ELECTRAD VITREOUS ENAMELED FIXED RESISTORS

Ceramic Tube—Monel Metal Lugs

100 WATTS 1x7 inches			200 WATTS 1 1/4 x 10 1/2 inches		
Ohms	Milliamperes	Volts	Ohms	Milliamperes	Volts
50	1414	70	50	2000	100
100	1000	100	100	1414	140
250	632	158	250	894	220
500	447	220	500	632	315
1000	316	315	1000	447	445
2500	200	500	2500	283	700
5000	141	700	5000	200	1000
7500	115	860	7500	163	1200
10000	100	1000	10000	141	1400
15000	81	1200	15000	115	1700
20000	70	1400	20000	100	2000
25000	63	1580	25000	90	2200
30000	57	1700	30000	81	2450
40000	50	2000	40000	70	2800
50000	44	2200	50000	63	3150
60000	40	2400	60000	57	3450
75000	36	2700	80000	50	4000
100000	20		100000	44	4450
			150000	23	

LIST PRICES

Ohms	
50 to 5000.....	\$1.80
6000 to 25000....	2.10
30000 to 50000....	2.40
60000 to 75000....	2.70
80000 to 100000...	3.00

LIST PRICES

Ohms	
25 to 10000.....	\$3.00
15000 to 100000...	3.60
150000	4.20

"D-N LIST"

OHMITE

HEAVY-DUTY HEAT-RESISTING WIRE-WOUND RESISTORS



10 watts, 1 to 25,000 ohms 1 3/4 x 3/8 ins.
20 watts, 30 M. to 100 M. ohms 2 x 1/2 ins.
All units have 1 1/2-in. tinned wire leads.

STOCK VALUES—10 WATT RED DEVILS

Ohms	Max. Current Milli-amps.	Ohms	Max. Current Milli-amps.	Ohms	Max. Current Milli-amps.
1	3,150	150	258	2,250	66
2	2,280	200	223	2,500	63
3	1,825	250	200	3,000	57
4	1,580	300	182	4,000	53
5	1,410	400	158	5,000	44
7.5	1,150	500	141	6,000	40
10	1,000	600	129	7,500	36
15	815	750	115	9,000	33
20	707	800	111	10,000	31
25	630	900	105	12,500	28
30	575	1,000	100	15,000	25
40	500	1,250	89	17,500	23
50	447	1,500	81	20,000	22
75	365	1,750	75	22,500	21
100	315	2,000	70	25,000	20

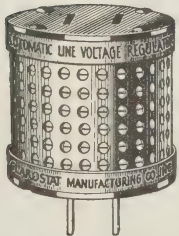
10 Watt Red Devils **\$0.48**

STOCK VALUES—20 WATT RED DEVILS

Ohms	Max. Current Milli-amps.	Ohms	Max. Current Milli-amps.	Ohms	Max. Current Milli-amps.
30,000	25	50,000	20	75,000	16
35,000	23	60,000	18	80,000	15
40,000	22	65,000	17	90,000	14
45,000	21	70,000	16	100,000	14

30,000 to 50,000 ohms **\$0.90**
55,000 to 100,000 ohms **\$1.20**

AUTOMATIC LINE VOLTAGE REGULATORS

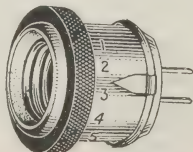


All types..... \$1.00		
Type No.	Rating Watts	For Use with Sets Consuming
O	50	Up to 60 Watts
A	100	60 to 100 Watts
B	150	100 to 150 Watts
C	200	150 to 200 Watts
D	250	200 to 250 Watts
E*	100	60 to 100 Watts

NOTE*: For use with 220-volt receivers.

WIRT VOLTAGE REGULATOR

No. 211—Variable voltage control for 6 tube sets or less..... **\$1.90**
No. 211B—Variable voltage control. 150 watt. For all 7 tube and larger sets..... **\$3.60**



OHMITE



New
Non-Inductive
Vitreous Enamel-
ed Resistors

These resistors are wound in such a way that the inductive effect is practically eliminated without increasing greatly the distributed capacity. Ohmite non-inductive resistors are recommended as DUMMY ANTENNAE, as load resistors of H. F. circuits in therapeutic equipment, etc.

50 WATT TYPE

Size—6 1/2" x 7/8"

Mounting centers 7 1/4"

Furnished with mounting brackets as shown.

Stock No.	Resist- ance	Max. Current in Mills	Max. Volt- age
2202	10	2,240	22
2203	25	1,420	35
2204	50	1,000	50
2205	100	707	70
2206	150	577	86
2208	250	447	110
2209	500	316	158
2210	750	258	193
2211	1,000	224	224
2212	1,500	183	274
2214	2,500	142	354
2216	3,500	119	417
2218	5,000	100	500

100 WATT TYPE

Size—8 1/2" x 1 1/4"

Mounting centers 9 1/4"

Furnished with mounting brackets as shown.

Stock No.	Resist- ance	Max. Current in Mills	Max. Volt- age
2402	10	3,160	31
2403	25	2,000	50
2404	50	1,414	70
2405	100	1,000	100
2406	150	815	120
2408	250	632	155
2409	500	447	220
2410	750	365	275
2411	1,000	316	315
2412	1,500	258	385
2414	2,500	200	500
2416	3,500	169	590
2418	5,000	141	700

List Price. Each..... **\$3.60** | List Price. Each..... **\$4.80**

CLAROSTAT

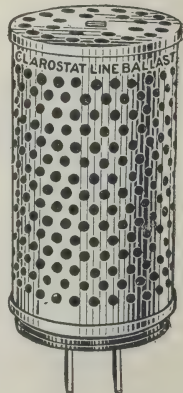


The leading line of power control devices. Line voltage controls, line ballasts, heavy duty variable resistors.

REPLACEMENT LINE BALLASTS

Replace Duresite Tubes, Amperites and other types of line ballasts—last much longer.
Each **\$2.30**

	Ballast No.
Bremer Tully	2169
Brunswick	2179
Clarion	2408
Grebe	6412
Grebe	6420
Grebe	6310
Grebe	0608
Kennedy	6412
Majestic 70	1516
Majestic 72	1508
Majestic 90	1210
Silver	2179
Simplex	2516
Sonora	2179
Stewart-W.—Model 900	5001
Stewart-W.—Model 950	5002
Stewart-W.—Model R100	5003
United Reproducer	2310



AMPERITE

Replacement Regulators for 2-Volt Battery Sets

Set Name	Set Model	Amperite Part No.
Silvertone	326, 242, 65	30 (1A2)*
	1576, 1712, 1713, 1714	31 (1B2)*
	223X, 224X, 266, 267	31 (1B2)*
	1710, 1711	52 (1C2)*
	331	1B1
	334, 324	1E1
	359	1F1
	345	1G1
Air Line	91	10AB
	77, 95	6AA
Bosch	042	5E1 (1A1)*
Erla	660	5E1 (1A1)*
	7700	6-1 (1J1)*
Philco	34-A	7H1 (1C1)*
Sentinel	7700	6-1 (1J1)*
Sparks With'gton	81, 82	5E1 (1A1)*
		2H1 (1D1)*

*New RMA numbers.
LIST PRICE... EA \$1.90

CONVERSION PLUG

For Converting Receivers Using Ballast Tubes to Air-Cell Operation



Fits in place of the ballast tube on receivers listed below and permits their operation with an Eveready Air Cell "A" battery. Remove ballast tube and insert the plug-in resistor. The correct "Conversion Plug" must be used because the total resistance of the "A" circuit must be correct to obtain full life and efficiency from the Air Cell battery and prevent tube burn outs.
List price\$0.90

Set Name	Model Number	Stock Number
Airline (Mont.-Ward)	62-91	4363
	77, 95	4364
Colonial	659	4362
Philco	38, 38A (Using 1C6 Transistor Tube)	4365
	38, 38A, (Using type 15 Transistor Tube)	4366
	34, 34A, 39, 39A	
Silvertone	1712, 1713, 1714, 1854, 1857	4360
	1710, 1711, 1711A, 7090, 7090A	4361
	1850, 1851	4362
Sentinel	660, 6200, 6234, 6241	4364
	7700, 7732, 7741	4365



VOLTAGE REDUCING RESISTOR

Reduces 220 to 110 Volts
Maximum rating, 60 watts.

No. 1063—Each.....\$1.90



No. 1076 No. 1077 No. 1075



No. 1150 No. 1015 No. 1011



No. 563 No. 1072 No. 248



No. 1174 No. 1151 No. 141



No. 1155 No. 1156

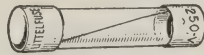
PILOT LITES

Genuine Mazda

3.2-volt. Box of 10.....	\$1.50
6.3-volt. Box of 10.....	1.50
2.5-volt. Box of 10.....	1.20
Less than box, each.....	.30
2.0-volt. Box of 10.....	2.40
Less than box, each.....	.30
Pilot Lites, Single lots, each	.20
110-volt Pilot Lites for Victor. Each.....	.60



FUSES



3AG Type—Size 1¼x¼ in. 1, 2, 3, 5, 10, 20 amperes. Each.....	\$0.10
Box of 5.....	.30
1AG Type—Size ¾x¼ in. 1, 2, 3 amperes. Each.....	\$0.10
Box of 5.....	.30
1AG Type—¼ ampere. Each.....	.20
Box of 5.....	.50

FUSE MOUNTINGS

Single and Double



No. 103—Single, for 3AG. Each....	\$0.18
No. 127—Double, for 3AG. Each....	.30

FUSE CLIPS

For Littelfuses and 3AG type. Best grade phosphor bronze. Spring will not lose tension.
No. 54—3 for.....\$0.05



Auto Radio Fuse Retainer

No. 1070—Takes 3AG fuse. Used in "A" and "B." Each.....\$0.16



Auto Radio Antenna Coupler

No. 1071—Also a handy item for radio repair shops. Each.....\$0.12

DRUM DIAL CABLE, BANDS AND BELTS



No. 1 Cable—Best grade made. 42-strand phosphor bronze.
Price per foot.....\$0.10
Price per 25 feet.....1.50
Price per 100 feet.....5.00

LINEN CORD DRIVE CABLE

Very high grade. Breaking strength, 200 pounds per foot.
Per foot.....\$0.12
Per 25 feet.....1.90
Per 100-foot spool.....6.00

PHOSPHOR BRONZE BELTING

3/16 in. wide by .005 in. thick.
Per foot.....\$0.16
Per 25 feet.....3.00

DUPLICATION DRIVE BELTS AND CABLES

AK36—Set of 3.....	\$0.48
AK42—Set of 3.....	.48
AK44—Set of 3.....	.48
AK60-61—Set of 3.....	.48
AK35-37—Set of 2.....	.30
AK40—Set of 2.....	.30
AK46—Set of 2.....	.30
AK52-53—Set of 2.....	.30
AK55—Set of 2.....	.30
Bosch—28, 29, tuning.....	.30
Bosch—28, 29, voltage control.....	.50
Bremer-Tully—14, 21, 31.....	.30
Brunswick—S14, 21, 31.....	.30
Brunswick—15, 22, front.....	.48
Brunswick—15, 22, rear.....	.48
Crosley—40S, 804.....	.36
Crosley—601, 602.....	.42
Crosley—120.....	.36
General Motors—"A".....	.48
Majestic—70, 71, 72.....	.24
Nine for \$2.00	
Majestic—15B.....	.48
Philco—65, Set of 2.....	.72
Philco—71.....	.30
Philco—91, 14.....	.30
Philco—111, 112, 112A.....	.30
Philco—76, 86, 87, 95, Set of 2.....	.72
Philco—96.....	.30
RCA—16, 17, 18.....	.36
RCA—80, 82, 86.....	.42
RCA—42, 48.....	.42
Sliver Marshall—726.....	.36
SM726SW—Belts. Set of 2.....	.48
SM30, 32, 30A, 36A.....	.66

No. 1076—Hexagon bakelite knob. Rounded dome. ¾ in. diameter by ¼ in. high. Each.....\$0.14

No. 1080—Same as above. 15/16 in. by ½ in. Each.....\$0.16

No. 1077—Walnut two-tone bakelite knob. ¾ in. diameter by ½ in. high. Each.....\$0.18

No. 1078—¾ in. diameter by ½ in. high. Each.....\$0.20

No. 1079—1 in. diameter by 9/16 in. high. Each.....\$0.24

No. 1075—Hexagon bakelite shaped top. ¾ in. diameter by ¾ in. high. Ea. \$0.12

No. 1150—Artistic bakelite walnut. 1¼ in. diameter by ¾ in. high. Each \$0.16

No. 1015—Flat walnut bakelite knob with pointer for compact radios. 1¼ in. by 5/16 in. Each.....\$0.14

No. 1011—Octagon walnut flat top. 1¼ in. diameter by 9/16 in. high. Each \$0.14

No. 563—Octagon black flat top. With pointer. 1¼ in. by 9/16 in. Each..\$0.24

No. 1072—Walnut bakelite. New design. ¾ in. diameter by 9/16 in. high. Each.....\$0.14

No. 1073—Same as above. 1 in. by 7/16 in. Each.....\$0.12

No. 248—Black rheostat arrow knob. 1 in. circle. Each.....\$0.14

No. 249—Same in 1½ in. circle. Ea. .18

No. 1174—Bakelite auto radio knob. Black. 1¼ in. diameter by ¾ in. high. Each.....\$0.24

No. 1151—Moderne two-tone walnut-bakelite. A popular knob. 1¾ in. diameter by ¾ in. high. Each.....\$0.18

No. 1152—Same, only 1 in. diameter by ¾ in. high. Each.....\$0.14

No. 141—Pressed wood knob. Matches RCA knobs. 1¾ in. diameter by ¾ in. high. Each.....\$0.30

No. 1155—Black bakelite bar knob. 1¼ in. long. Each.....\$0.16

No. 1157—Same in brown. Each.... .16

No. 1156—Black bakelite bar knob. 2¼ in. long. Each.....\$0.18

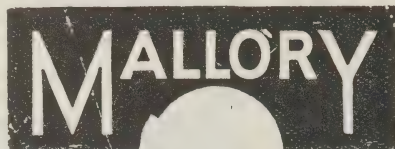
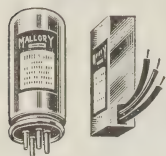
No. 1158—Same in brown. Each.... .18

All of these are for ¼-in. shafts.

"D-N LIST"

31

AUTO RADIO REPLACEMENT VIBRATORS



Radiant



YOU WILL FIND OUR STOCK COMPLETE

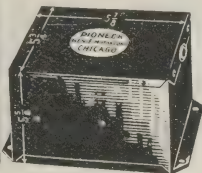
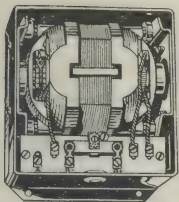
Make and Model	Radiant No.	List Price	Mallory No.	List Price	Make and Model	Radiant No.	List Price	Mallory No.	List Price
AIRLINE					MOTOROLA—Continued				
62	3443	\$6.00	253	\$6.30	61, 88	3444	\$6.00	302S	\$6.00
118	3417	5.40	253	6.30	66, 77	3445	6.90	230	6.90
					Dual 6, Twin 8	3417	5.40	253	5.40
ARVIN					OLDSMOBILE				
7, 17, 17A, 27, 37	3262	5.40	294	5.40	393884, 393885, 405045, 405046, 405057, 405062	3461	6.60	273C	6.60
10A, 16, 20A, 30A, 30B, 15 (2nd series), 25 (2nd series), 35 (2nd series), 45 (2nd series)	2742	5.40	292	5.40					
15, 25, 35, 45, all 1st series	3261	5.40	296	5.40					
ATWATER KENT					PACKARD				
424, 534	3308	6.60	222	6.30	1933, 1934	3320	5.40		
666, 776	3263	5.40	296	5.40					
816	3848	6.30	226	6.30	PHILCO				
AUDIOLA									
23-S7, 33-S6			312T	6.00					
A-6	3308	6.60	225	6.90					
345, 346, 347	3356	5.80	297	5.40					
C6, 64, 74	3782	5.40							
BELMONT									
660	3314								
	3442	9.60							
	Head	5.70	220B	6.00					
670	3263	5.40	296	5.40					
BOSCH									
140, 150 series 2, 160, 45 Syn.	3283	6.60	271	6.60					
524, 624, 79-2nd series	3417	5.40	253Y	5.40					
45 Non Syn., 79 1st series	3263	5.40	253	5.40					
B. O. P. (Buick, Olds., Pontiac)									
405057, 405062, 544245, 544246	3461	6.60	273C	6.60					
980383, 980393, 980455, 980459	3315	6.30	221	5.70					
CADILLAC									
O72 1st series	3443	6.00	206	6.00					
O72 2nd series, O6W Std., O6W Master	3318	6.90	210	6.90					
6U2 Std.	3417	5.40	253	5.40					
CHEVROLET									
364441	3313	5.70	221	5.70					
600565, 600249, 600565	3315	6.30	222	6.30					
601038, 601176, 601177, 601547, 601574	3461	6.60	273C	6.60					
CROSLEY									
98, 99, 102, 103, 119, 5A1	3317	6.90	223	6.90					
4A1, 5A3	3789	6.00							
ERLA-SENTINEL									
602	2747	5.70	292	5.40					
603	3375	5.40							
5500	3260	5.40	294	5.40					
7M, 10M	3888	5.40							
FORD-MAJESTIC									
Plug-in Pack	3312	12.00							
Standard Pack	3310	9.60							
Head Only	3442	5.70	220B	6.00					
Plug-in Vibrator	3263	5.40							
FORD ZENITH									
	3263	5.40							
GEN. ELEC.									
B40, B52, C41, C61	3319	6.60	273	6.60					
C60	3417	5.40	253	5.40					
D50, D51, D52	3883	6.00	287M	6.60					
D72	3262	5.40	294	5.40					
HUDSON TERRAPLANE									
Majestic Head	3442	5.70	220B	6.00					
Zenith '33 Models	2867	5.40							
Zenith '34 Models	2867	5.40							
Zenith '35 Models	3865	5.40							
KARADIO									
1934-35 Models	3263	5.40							
L. TATRO									
K665, H465, J665, I465 (6 Volt Household)	3283	6.60	275	6.60					
MAJESTIC									
66 Head, 116, 116A	3442	5.70	220B	6.00					
66 (Pack) Standard	3310	9.60							
66 (Pack), 84 Tube	3811	10.80							
MALLORY ELIMINATOR									
Type 1			201	6.00					
Type 2			202	6.00					
Type 3			203	6.00					
Type 4			204	6.00					
Type 5			205	6.00					
Type 6			206	6.00					
Type 10			210	6.90					
Type 11			211	6.90					
Type 12			212	6.90					
Type 13			213	6.90					
Type 14			214	6.90					
MOTOROLA									
34	3260	5.40	294	5.40					
44, 55, 55A	3290	6.90	234	6.90					
41A, 66A, 77A	3283	6.60	270B	6.60					
57, 75, 100	3815	5.40	253T	5.40					

32 VOLT HOUSEHOLD SETS

AUDIOLA				
32 Volt	3608	6.30	F312	7.20
DELCO				
4049, 4050	3607	7.20	F223	8.10
MAJESTIC				
Complete Pack	3316	12.00		
Head Only	3460	6.30	F220C	7.20
SILVERTONE				
4 Prong	3395	6.00		
6 Prong	3503	6.90		
SIMPLEX				
1933, 1934	3225	6.60	F221	6.90
L. TATRO				
F923, F913, F283, J5	3462	6.60	F204	6.00
N54, L54, O84	3463	7.50	F211	7.50
N74, D625, C625, F725, L94, O94	3395	6.00	F251	6.00
WELLS GARDNER				
1934 1st series	3395	6.00		
1934 2nd series	3651	6.30	F253	6.30
1935	3651	6.30		

PIONEER GEN-E-MOTORS

Small Size 2 7/8 x 5 1/2 x 5 1/2 Inches



"B" Battery
Eliminators for
Radios on
Autos, Boats
and Farms

6 VOLT AUTO MODELS

No. 5180—180 volts at 30 M. A. Drain on "A" 1.90
amps, no intermediate tap.....\$21.60

No. 5180A—Same as No. 5180 except has 90 volt
tap\$22.20

No. 5200A—200 volts at 40 M. A. Drains 2.75
amps.\$21.60

No. 5250—250 volts at 50 M. A. Drains 4.20
amps.\$21.60

6 VOLT FARM MODEL

No. 6280AT—180 volts. Tapped at 22 1/2, 45, 67 1/2,
90 and 135, 40 M. A. Drains 2 amps. Price..\$30.00

6 VOLT—SOUND TRUCKS

No. 7565—265 volts at 75 M. A. Drains 5
amps.\$37.20

No. 7300—300 volts at 100 M. A. Drains 8.75
amps.\$40.80

32 VOLT MODEL

Works Great on Delco Plants

No. 3280AT—180 volts. Tapped at 22 1/2, 45, 67 1/2,
90 and 135, 40 M. A. Drains 2 amps.....\$30.00

MODEL J-W GEN-E-MOTOR
UNIT

To Replace Vibrators

Size 4 1/8" high, 5 1/2" wide, 2 7/8" deep

Replace defective vibrator units with a J-W Gen-E-Motor
Unit. You use old filter system. The J-W Unit merely re-
places vibrator. Not a complete "B" eliminator. Ends vibra-
tor troubles. One year unconditional guarantee.

No.	Volts	M. A.	Battery Drain	List Price
JW-18	180	30	1.94	\$15.60
JW-20	200	40	2.75	15.60
JW-25	225	50	3.80	15.60
JW-50	250	50	4.20	15.60

Special Plug-In Type for Ford Majestic Sets

JW-F	250	50	4.20	\$15.60
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For 32 Volt Radios

JW-32	210	45	.24	\$19.80
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PIONEER GEN-E-MOTOR CONVERTERS

These new low price D.C. to A.C. converters have proven
extremely dependable and are conservatively rated. One year
guarantee. Base contains complete filter system and has a
standard plug-in outlet for the A.C. voltage output.

Type No.	Input Volts	D.C. Current	Output A.C. Volts	Volts- Amps.	List Price
660	6	19 Amps.	110	60	\$70.80
3211	32	5.6 Amps.	110	110	49.80
3220	32	10.0 Amps.	110	200	60.00
3230	32	15.0 Amps.	110	300	77.40
1111	110	1.78 Amps.	110	110	49.80
1130	110	3.85 Amps.	110	300	77.40

WRITE FOR GEN-E-MOTOR CATALOG

AMERICAN TELEVISION AND RADIO CO.
ATR D.C.-A.C. INVERTERS

110 Volts A.C. from

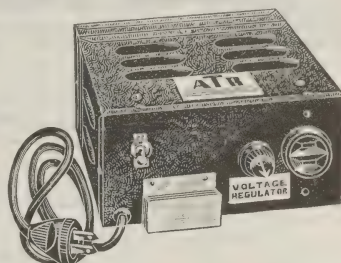
6 volts D.C.

32 volts D.C.

110 volts D.C.

\$27.00

Nothing Else to Buy

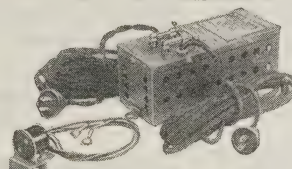


Type	D.C. Input	A.C. Output 50-60 Cycles	Watts Max. Output	List With Filter
ATR 6	6 Volts	110 Volts	50 Watts	\$27.00
ATR 12	12 Volts	110 Volts	100 Watts	27.00
ATR 32	32 Volts	110 Volts	100 Watts	27.00
ATR 110	110 Volts	110 Volts	200 Watts	27.00

Size, all models, 7 3/4 x 8 x 3 3/4 inches. Weight, 16 pounds.

MALLORY BATTERY
CHARGERS

Mount Right On the Car.
Trouble-Free, Dry, Disc
Type. A Modern
Necessity



No. 5535—A De Luxe Charger. Max. charging rate of 5 1/2
amps, tapering off to 3 1/2 amps, as the battery becomes fully
charged. Complete. List.....\$13.80

No. 3 Booster—Has a max. charging rate of 4 amps., tapering
off to 2 amps. Complete. List.....\$8.90

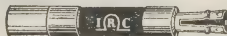
AUTO RADIO SUPPRESSORS

IRC Suppressors.

Built for the Longest
Service On the Tough-
est Jobs



Type MS



Type MD



Type MC



Type MCA



Type MCB

Type MS—Standard for spark plugs
on most cars.

Type MD—Distributor suppressor.

Type MC—Cable—where cable may
be spliced.Type MCA—For recessed plugs—
Buicks, etc.Type MCB—Extremely light—for
Fords.

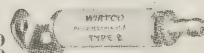
All types, List Price, each..\$0.36

SECURITY VALUE-PLUS
SUPPRESSORS

No. W100—Spark Plug Type. Each \$0.30

No. W101—Distributor Type. Each. .30

8 for \$2.00

FORD V-8 SUPPRESSOR
DISTRIBUTOR BRUSH

Replaces Original Brushes

Two suppressor brushes are needed for
each Ford.

No. V-8S—Each\$0.40

10 for \$3.60

LYNCH FILTASTATS

Wire wound inductances of
low resistance (250 ohms) de-
signed to replace carbon sup-
pressors. Allows better spark
and more gas mileage.

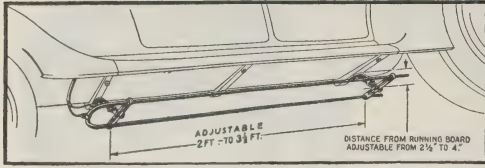
No. L100—Spark Plug type.
Each\$0.66No. L200—Distributor type.
Each\$0.66No. L400—Cable type.
Each\$0.66LYNCH
SUPER-FILTASTAT

One main distributor sup-
pressor (350 ohms) eliminates
the noise in most cars. Very
successful.

No. 1800—Distributor type.
Each\$3.30No. 1801—Cable type.
Each\$3.30

"D-N LIST"

Auto Radio Supplies



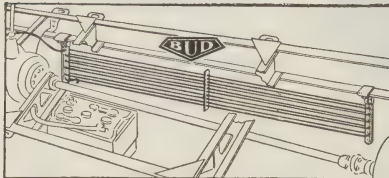
RCA Dipole Auto Antenna

Constructed of metal tubing coated with durable insulation. 48 ins. long, 6 ins. wide. The noise-reducing Dipole in operation acts as a counterpoise with the car acting as the aerial. Adjustable. Complete with shielded lead-in, bayonet-type plug and all hardware. No. 9605—List \$3.10



Fine copper mesh moulded into rubber. Insures greater volume—easy to install. No. 325—Complete with hardware..\$3.30

UNDER-CAR AERIAL



Ideal for turret top cars. Has very good pick-up. No holes to drill—clamps securely to frame of car. Entirely out of sight. Adjustable. Heavy insulated wire. Cannot be injured or torn off by road obstructions. No. 326\$2.40



The largest metal running-board auto aerial on the market. Made in the Northwest to give best results in the Northwest. Easy to install. No. V1244.....\$4.70



No. VDF80—Contains a condenser and a choke in fibre container. Each...\$0.96

SOLAR DOME LITE FILTER



No. RF-0143—Contains a condenser and a choke in metal container. Each..\$1.20

GENUINE RCA VIBRATORS



No. 7604—Exact replacement for M-34, and GE B-40. List\$7.20
No. 6577—Vibrator base only for M-34 vibrator. Contains vibrator base and buffer containers. List\$1.00

RCA Part No. 7689 — Vibrator for M105\$8.60
RCA Part No. 7694—Vibrator for M116\$8.60
RCA Part No. 7757—Vibrator for M123\$10.20
RCA Part No. 4278—Base for above vibrator\$0.34
RCA Part No. 7780—Vibrator for M107\$6.00
RCA Part No. 6980—Base for above vibrator\$0.24
RCA Part No. 5067—M109 Pri. Inter-rupters\$4.50
RCA Part No. 7857—Full wave M104, M108\$6.80



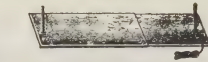
Copper mesh. Covered with special grey fabric. No. 342.....\$1.20
RCA roof antenna, 14"x34" copper mesh covered with fabric, good results. No. 7621—Brown\$1.80
No. 7266—Grey 1.80

ELECTRALLOY ALL METAL AERIAL



A popular type of car antenna—good pick-up. Unaffected by weather—35 ins. long, 8 ins. wide. Complete with heavy springs and rubber washers. No. 346. List\$3.00

ICA METAL RUNNING-BOARD AERIAL



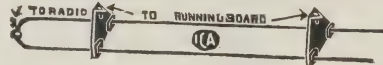
An efficient antenna—easily attached. Complete with all hardware. No. 343\$1.80

TRIANGLE LO-LOSS AUTO-RADIO AERIAL



An extremely popular type of undercar aerial—good pick-up. 20 feet of heavy phosphor bronze cable together with durable lead-in and all necessary hardware. No. 4342—List\$1.90

DOUBLET AUTO AERIAL



A real noise-reducing car antenna. Comes complete with mounting brackets and hardware. No. 4345\$2.20

See Generator and Vibrator Condensers In Condenser Section

ROTARY TUNING CABLES AND HOUSINGS FOR AUTO RADIOS

CABLES COMPLETE



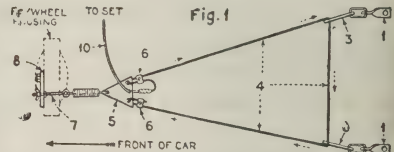
No. 1 No. 2 No. 3 No. 4

18" complete with any 2 fittings..\$1.50
24" complete with any 2 fittings..1.80
30" complete with any 2 fittings..2.20
36" complete with any 2 fittings..2.60

Order cables by catalog numbers, for example, an 18" cable with a No. 1 and a No. 2 fitting would be No. 12—18".

"D-N LIST"

LYNCH AUTO ANTENNA



LYNCH AUTO KIT A-1

Especially designed for Turret Top cars. Increases volume—reduces interference.

Installs easily beneath car. Kit consists of 20 feet Lynch "Hi-Mo" auto antenna wire (42 strands— $\frac{1}{8}$ in. diameter), rear axle insulator assemblies, flywheel housing insulator assembly with tension adjuster, necessary connectors and 10 feet special lead-in wire.....\$4.20

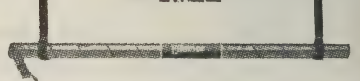
LYNCH KIT A-2

For Old Installations

A coupling system with a matched impedance transmission line which will reduce interference on any existing installations. It will raise volume on any present installation 100% to 300%. Kit A-2 consists of one Lynch auto antenna impedance matching transformer, one auto radio receiver impedance matching transformer, and 10 feet Lynch No. Stat shielded transmission line with hardware for connecting.....\$6.00

LYNCH DE LUXE KIT A-3

Combines all of the materials in Kits A-1 and A-2. Kit A-3.....\$9.60



THE NEW WONDER TUBULAR UNDER CAR ANTENNA

Has 830 feet of copper wire pressed into flat insulated sheet which is rolled up into tube $2\frac{1}{2}$ "x36 inches. This gives maximum capacity effect. Results will amaze. Waterproofed. Complete with webbing straps for attaching to running board or car frame. No. FRC-8r.\$4.80

RADIART VIBRATOR AND AUTO RADIO POWER SUPPLY ANALYZER

You pay only \$7.50 down. Pay the balance by purchasing Radiart Replacement Vibrators. Write to Lew Bonn Co. for complete details.

CABLE AND HOUSING

Without Fittings

No. CH18—18", Round ends.....\$1.50
No. CH24—24", Round ends.....1.80
No. CH30—30", Round ends.....2.20
No. CH36—36", Round ends.....2.60

CABLE ONLY

Without Housing or Fittings

No. CO18—18"\$0.90
No. CO24—24" 1.10
No. CO30—30" 1.50
No. CO36—36" 1.60

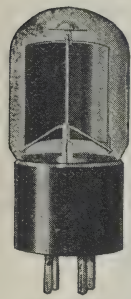
PHOTOELECTRIC PARTS—CAR RADIO DIALS

GM LABS. EQUIPMENT

The Approved Line—Used in laboratories and universities everywhere. We recommend G. M. products unreservedly. Photoelectric cells and their applications to various industrial uses offer one of the most promising futures of any allied radio science. Many interesting experiments can be tried with this equipment—and in this manner a good knowledge of photoelectric work can be obtained.

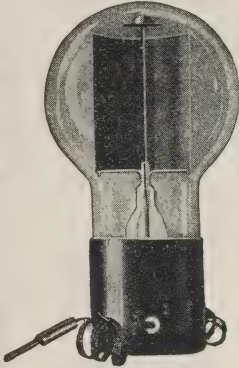
G. M. LABS. VISITRON PHOTO-ELECTRIC CELLS

Visitron Type A Cells are gas filled. They carry a full guarantee of one year and under normal operation their life greatly exceeds the guarantee period. Visitron quality can be evaluated in terms of high sensitivity, long life, high glow voltage, stability and high frequency response. The inserted metal plate construction is a decided improvement over older types of cells in which the sensitive surface was deposited on the inner wall of the glass envelope.



No. 71A.

Visitron Cell Type 71A. List...\$12.00
Visitron Cell Type 59A. List... 14.40



No. 59A.



G. M. LABS. ELECTRO-MAGNETIC RELAY

For operation on D. C. and full or half-wave rectified current.

These relays are an improved form of sensitive electromagnetic relay which are especially suitable for use in D. C. control circuits involving either "on-off" or marginal operation. They are particularly useful in electronic devices in conjunction with thermionic or gas filled discharge tubes. High speed of operation, ruggedness of construction, accuracy of alignment, large current capacity of the contacts and ease of adjustment are but a few of their features.

Operating characteristics of Standard D. C. Relays on Continuous Current:

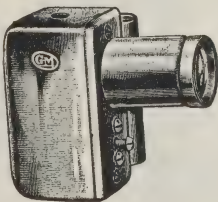
Cat No.	Res. of Coll.-Ohms	Volts Pick-Up	Amps. Pick-Up	List Price
E63CAB	6,300	32	.005	\$6.60
E10CAB	1,000	12.5	.0125	5.70
E10XAB	100	4	.040	4.80

LIGHT SOURCES AND PHOTOELECTRIC CELL HOUSINGS

No. 1227A—Light source for photoelectric applications requiring a light beam projected up to 25 ft. A 6 volt lamp is mounted in a steel case 4 ins. high. An adjustable lens tube projects 2½ ins. when closed and 3½ ins. when extended.....\$11.00
No. 1227—Light source, same as No. 1227A except without lens tube. Lens is mounted flush in front cover. For use at distances up to 6 ft.....\$8.40

CELL HOUSINGS

No. 1216—Has a 1½-in. diameter aperture tube 3 ins. long. Has socket for Visitron Type A Cell. List.....\$13.00



SPECIAL MIRROR

No. 2510—Adjustable mirror incorporates the two primary essentials for a mirror to be used with photoelectric equipment, namely, convenience in making critical adjustment and retention of that adjustment even under severe conditions of vibration. Mounted in cast aluminum case the mirror is supported on a ball and socket joint and is adjustable. List \$12.50

MANUAL ON PHOTOELECTRIC EQUIPMENT
"THE ELECTRIC EYE" YOUR NET COST \$0.50
WRITE FOR COMPLETE G. M. LABS. CATALOG

LATEST CROWE DIALS

UNIVERSAL CONTROL FOR ALL CARS



For instrument panel, under-dash or steering column mounting. Has convex crystal glass. Supplied 0 to 100 or 100 to 0. Comes complete with knobs, pilot lead, socket and bulb.

No. 600—Head only.	Ratio 6 to 1.	List.....	\$4.80
No. 601—Head only.	Ratio 8 to 1.	List.....	4.80
No. 602—Head only.	Ratio 10 to 1.	List.....	4.80
No. 603—Head only.	Ratio 12 to 1.	List.....	4.80

GENERAL MOTORS

Special Panel Mounting

INSTRUMENT CONTROL

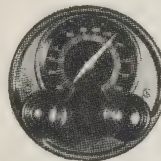
For all 1935 Oldsmobiles, Pontiacs and Chevrolet Masters.



No. 250—Head only.	Ratio 6 to 1.	List.....	\$7.20
No. 251—Head only.	Ratio 8 to 1.	List.....	7.20
No. 252—Head only.	Ratio 10 to 1.	List.....	7.20
No. 253—Head only.	Ratio 12 to 1.	List.....	7.20

Escutcheons for Above Heads

No. 4910—All 1935 Oldsmobiles.	List.....	\$1.10
No. 4887—All 1935 Pontiacs.	List.....	.90
No. 4887—All 1935 Chevrolet Masters.	List.....	.90



FORD DELUXE INSTRUMENT CONTROL

A complete kit of hardware and escutcheon for mounting Crowe Universal Head Nos. 600 to 603 in 1935 Ford DeLuxe Cars. Taupe finish. Does not include control head.

Kit No. A4370—List.....\$1.20

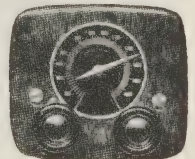
For Ford 1935 Standard

Kit No. A4644—Maroon finish. List....\$1.20

INSTRUMENT PANEL MOUNTING KITS

For Crowe Universal Heads
Use Controls Nos. 600 to 603.

Heads Not Included



No. A-4371—Chrysler 1935 Airstream—Vertical walnut grain. List.....\$1.50
No. A-4344—De Soto 1935 Airstream—Horizontal walnut grain. List.....\$1.50
No. A-4344—Dodge 1935—Horizontal walnut grain. List... 1.50
No. A-4611—*Ford 1934 De Luxe and Standard—mahogany grain.....\$1.50
No. A-4344—Hupmobile 1935—Horizontal walnut grain. List..... 1.50
No. A-4344—Plymouth (early 1935)—Horizontal walnut grain. List.....\$1.50
No. A-4541—Plymouth (later 1935)—Taupe finish. List... 1.50
*In mounting FORD 1934 kit in De Luxe models it will be necessary to file two notches in the instrument panel and break out the ash tray stop, but this is not difficult. Same kit can be used for Ford 1934 Standard models, but hole must be cut in panel.
Above kits contain an appropriate escutcheon plate and all necessary brackets, nuts, screws and washers.

CAR RADIO DIAL ACCESSORIES

No. 104—Gear Reduction—Can be attached to any plain condenser without built-in gears. Ratio 6 to 1 in 360°. List \$0.70
No. P4524—Coupling—For connecting flexible shaft to condenser or volume control. List per pair.....\$0.90
No. P3119—Bracket for fastening casing of flexible shaft to chassis. Per pair. List.....\$0.90

SEE FLEXIBLE SHAFTS ON
PAGE 34

JENSEN ELECTRONIC KIT

A complete kit of parts including slanting panel case, No. 71A Visitron Cell, No. E63CAB Relay and all other parts necessary to construct a complete photoelectric relay. Uses a 12A radio tube as a self-rectifying amplifier. A. C.-D. C. operation. Will close or open one side of line. SPST. Relay will pick up at 3 M. A. and will close 110 volt 2 amp. circuit. Hundreds of interesting experiments can be conducted with this quality kit. Complete with diagrams.
No. J-PE.....\$35.00

"D-N LIST"

SOLDER



KESTER SOLDER ROSIN CORE

1-lb. spool\$1.20
5-lb. spool 5.50

KESTER ROSIN CORE

4-oz. handy spool. \$0.30



KESTER ACID CORE

1-lb. spool\$1.12
5-lb. spool 5.50

KESTER ALUMINUM SOLDER

Flux-filled. Instructions with each spool.
Handy size spool.....\$0.34
1-lb. spool 3.60



KESTER SOLDERING PASTE

2-oz. can\$0.24

KESTER TRICHLORON SOLDERING SALTS

1-lb. can\$1.00
5-lb. pail 3.50

FRICTION TAPE

Highest Quality. Fresh Stock

4-oz. roll; 3/8 in. width.....\$0.20
8-oz. roll; 3/8 in. width..... .34

RUBBER SPLICING TAPE

8-oz. roll; 3/8 in. width.....\$0.60

MENCHEN'S AUTO RADIO LOCK



Entirely new kind of lock. Impossible to smash or break it. Can be installed in a minute—only a wrench needed. The lock slips over the base of one of the bolts holding the radio to the car. A good sales item for all car radio sales agencies. Absolutely guaranteed.
No. MRL\$1.90

ATTENTION!

Customers south and east of St. Paul will find our St. Paul store very conveniently located right on Route 12—just two blocks up the hill toward the State Capitol from the Golden Rule and Emporium. We carry a complete stock at the St. Paul store and you will always find room to park. We feel sure you will like the service you get at the St. Paul store—try it the next time you come to the Twin Cities.

YOUR COMMENTS ON OUR 1936 CATALOG WILL BE APPRECIATED. HOW DO YOU LIKE IT?

CLIPS



No. 45—Pee Wee Clip; length 1 1/2 in., jaw spread 1/2 in.; Cadmium plated. Each\$0.10
Box of 10 60
No. 48B—10 amp. clip; length 2 in.; jaw spread 9/16 in.; Cadmium plated. Each\$0.10
Box of 10 70
No. 24A—25 amp.; length 2 1/2 in.; jaw spread 1 in.; lead coated. Each.....\$0.18
Box of 10..... 1.80
No. 21A—50 amp.; length 3 1/2 in.; jaw spread 1 1/4 in.; lead coated. Each.....\$0.28
Box of 10 2.40

RUBBER INSULATORS

For use with above clips



Protects against electrical shocks.
Furnished red and black.

No.	Clip No.	Each	Lot of 10
47	45 Pee Wee	\$0.14	\$1.00
49	48B	.18	1.20
26	24A	.30	2.80
23	21A	.48	4.20
87	85	.10	.70

SPECIAL SOLID COPPER RADIO FREQ. CLIPS



No. 45-0S—10 amp. clip; phosphor bronze spring; brass screw; length 1 1/2 in.; jaw spread 3/8 in. Each.....\$0.18
No. 27C—10 amp.; spring and screw same; length 2 1/4 in.; jaw spread 1/2 in. Each\$0.28



ALLIGATOR TEST CLIPS

No. 45AT—New type test clip, ideal for getting into tight places.
Each\$0.08 Ten for.....\$0.64
Mueller Alligator Clip—double spring
No. 85—Mueller Alligator Clip—double spring action. Each—List.....\$0.12
See insulated alligator clips, etc., in hardware section.

MIDGET KNIFE SWITCHES Bakelite



No. 2223—S. P. S. T., 1 1/4 x 1/2 ins..\$0.24
No. 2224—S. P. D. T., 1 1/4 x 1/2 ins.....36
No. 2225—D. P. D. T., 1 1/4 x 1 ins.... .60

PORCELAIN KNIFE SWITCHES Small Size



No. 235—S. P. S. T.....\$0.36
No. 236—S. P. D. T. 42
No. 237—D. P. S. T. 48
No. 238—D. P. D. T. 72
No. 239—Triple P. D. T. 1.08

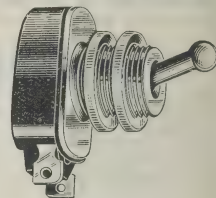
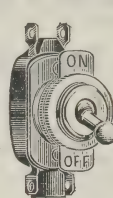
SEE SOLDERING IRONS ON PAGE 88

SEE TERMINAL STRIPS AND TIE POINTS ON PAGE 91

SEE HARDWARE ON PAGES 90-91

"D-N LIST"

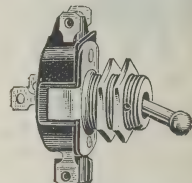
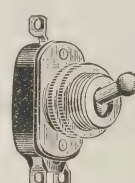
SWITCHES



CARLING TOGGLES

Very Good Quality. All Rated at 6 Amps., 125 Volts

No. SS100—Single pole, single throw. Long or short shank. Each\$0.34
No. SD200—Single pole, double throw. Long shank only. Ea. \$0.50
No. DS300—Double pole, single throw. Long shank only. Ea. \$0.56
No. DD400—Double pole, double throw. Long shank only. Ea. \$0.80



Long shank 3/8 in. Short shank 1/4 in.

HART HEGEMAN TOGGLES

Best quality obtainable. All rated at 6 amps., 125 volts.

No. HH1—S. P. S. T. Long or short shank. Each\$0.50
No. HH2—S. P. D. T. Long shank only. Each\$0.60
No. HH3—D. P. S. T. Long shank only. Each\$0.70
No. HH4—D. P. D. T. Long shank only. Each\$0.90



ROTARY SWITCH

3 amps. Rating

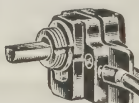
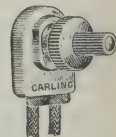
1-in. shaft.

No. 395—Single pole, single throw..\$0.36
No. 396—Single pole, double throw.. .42

ROTARY CANOPY SWITCH

Used in Bridge Lamps, Floor Lamps; 3 amp. 125 volts.

No. C102—3/16 in. stem to .015\$0.60
No. C102B—5/16 in. stem to .125 60



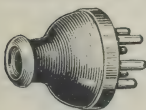
G. E. ROTARY AC SWITCH

Regular rotary "ON" and "OFF" switch. 3 amp. 125 V. Underwriter approved; 8-in. insulated leads; shaft 1/2 in. long.
No. SGE-99—Each\$0.20
Ten for \$1.65

SNAP-ON KNOB

Special knob for above switch. Polished black bakelite, push-on type; 1 1/2 in. diameter. Each\$0.10
Ten for \$0.70

Speaker Plugs



HEAVY DUTY RUBBER PLUGS

Handle is durable rubber 1 1/4 in. long. Plugs are of Bakelite.

No.	Male.		No.	Female.	
	List	Prongs		List	
104RS	\$0.24	4	99A4	\$0.48	
105RS	.24	5	99A5	.54	
106RS	.24	6	99A6	.60	
107RSA	.24	7S	99A7S	.60	
107RS	.24	7L	99A7L	.60	

EASY-GRIP BAKELITE SPEAKER PLUGS



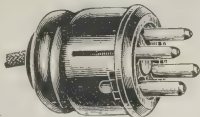
No.	Male.		No.	Female.	
	List	Prongs		List	
984	\$0.36	4	984F	\$0.48	
985	.36	5	985F	.48	
986	.36	6	986F	.48	
987S	.36	7S	987SF	.48	
987L	.36	7L	987LF	.48	
988	.60	8	988F	.72	



FLAT SPEAKER PLUGS

4, 5, 6, 7S, 7L, prongs.
No. SP 100. Each.....\$0.12

AMPHENOL CABLE CONNECT-ORS



Strong amphenol plugs and sockets housed in steel caps.

Unbreakable.

No.	Male.		No.	Female.	
	List	Prongs		List	
PM4	\$0.30	4	PF4	\$0.30	
PM5	.30	5	PF5	.30	
PM6	.30	6	PF6	.30	
PM7S	.30	7S	PF7S	.30	



AMPHENOL CABLE CONNECTOR METAL COVERS

A threaded steel shell consisting of a male and female section. These shells are slipped over the regular cable connectors and serve to lock the two sections together.

No. C-CAB—2 pieces. Each.....\$0.30

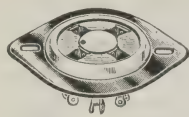
SUPREME TEST EQUIPMENT ON THE FHA LOAN PLAN

Now every serviceman can modernize his testing facilities with new time-saving Supreme equipment—WITHOUT PAYING A CENT DOWN, and pay only a fraction each month of the new business and profits this equipment will make possible.

No down payment—as long as 18 months to pay. Present FHA act expires in April. Write to us now for full details. See the new equipment available on this plan in January issue of the leading trade papers. It is important that you write NOW—as this plan absolutely ends April 1, 1936.

See Supreme Testers on
Pages 78-79

Sockets



AMPHENOL STEATITE SOCKETS

One of the strongest sockets made. Low-loss socket diameter 1 1/4 inches; mounting centers slotted 1 1/2 in. to 2 in.

Type RSS—In 4, 5, 6 and 7s. Each.....\$0.48
Type RSS—In 7L and 8 octal. Each......60

INSULEX WAFER SOCKET

A low-loss socket, especially desirable for use in transmitters. Sturdily built, real contacts.

No. 2600—4-prong	\$0.48
No. 2601—5-prong	.48
No. 2602—6-prong	.27
No. 2603—7-prong, large.....	.60
No. 2604—7-prong, small.....	.60
No. 2605—8-prong, octal.....	.66



INSULEX BASE BOARD SOCKET

A real socket for H. F. work and Transmitters. Insulex is a white colored ceramic material, glazed finish.

No. 290—4-prong	\$0.60
No. 291—5-prong	.60
No. 292—6-prong	.66
No. 294—7S and 7L combination....	.66
No. 300—8 octal	.72

NAALD COMPOSITE SOCKETS

Molded Bakelite. Hole size 1 1/4 in., mounting centers 1-11/16 in. Popular in test equipment.
No. 456—Combination 4, 5, 6 prongs \$0.60
No. 477—Combination large and small, 7 prongs......60
No. 567—Combination 5, 6, 7 (small) prongs......60

TUBE SHIELDS



No. 392—For new Dome type tubes, 3-piece ventilated aluminum, 1-27/32 in. mounting centers. Each.....\$0.18
10 for \$1.70

No. 392A—Same in 1 1/2 in. mounting centers. Each.....\$0.20
No. 292—For old type, large round top tubes, 1-27/32 in. only. Each.....\$0.20



GLOVE-TITE TUBE SHIELDS

No. ST-12 fits 57, 58, 2A7 and similar tubes. Each \$0.14

No. ST-14 fits 2A4, 35, etc. Each \$0.14

These shields come in two pieces, complete with all hardware.

COIL SHIELDS

ALUMINUM

With detachable base which makes it possible to lift the shield off the base.

No. 1539—2 1/2 x 3 in. high \$0.30
No. 1540—2 1/2 x 3 1/2 in. high .36



WAFER TYPE SUB-PANEL SOCKETS



Tight grip, long-lasting contacts.

Standard Size

1-27/32 in. Mounting Holes

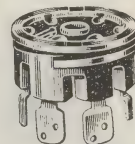
Type L—In 4, 5, 6, 7 small and 7 large prongs. Each.....\$0.11
Ten for.....1.20

Midget Size

1 1/2 in. Mounting Holes

Type M—In 4, 5 and 6 prongs....\$0.12
Ten for.....1.10
In 7 small and 8 octal......18

AMPHENOL SOCKETS



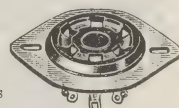
The most perfect contacts and sturdiest constructed. Made of molded bakelite. Held to chassis with locking ring of spring steel. Mount in 1-5/32 in. hole—large size

7 prong and 7 comb. in 1-5/16 in. hole. Locking ring included.

Type S—In 4, 5, 6, 7 small and 7 large prongs. Each.....\$0.12
Ten for.....1.10

Type S—In 7 small and 7 large combination and 8 octal. Each.....\$0.16

AMPHENOL ADAPTER PLATE



The type S sockets can be had as illustrated at right with steel plate. Slotted mounting hole centers from 1 1/2 to 2 in.

Type RS—In 4, 5, 6, 7 small and 7 large. Each.....\$0.14
Ten for.....1.30

Type RS—In 7 small and 7 large combination and 8 octal. Each.....\$0.18



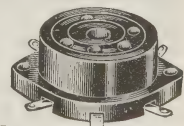
TUBE SHIELD BASE

Made 1-19/32 in. for standard tube shields. Fits under amphenol sockets and chassis plugs. Each.....\$0.04

EBY SOCKETS

TYPE 12

Molded Bakelite Sockets



Connections from below or above sub-panel. 1-11/16 in. mounting centers

No. E124—4 prongs.....	Each	5 for
No. E125—5 prongs.....	\$0.36	\$1.60
No. E126—6 prongs.....	.36	1.60
No. E127SL—Comb. large and small 7 prongs.....	.44	2.00
No. E12C5—6—Comb. 5 and 6 prongs.....	.44	2.00
No. E128—8 octal.....	.54	....

TYPE 8

Molded Bakelite Socket. Sub-panel Connections.

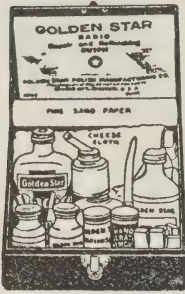
1-11/16 in. Mounting Centers.

No. E84—4 prongs.....	Each	5 for
No. E85—5 prongs.....	\$0.24	\$1.10
No. E86—6 prongs.....	.30	1.40
No. E87S—7 prongs, small..	.30	1.40
No. E87L—7 prongs, large..	.30	1.40
No. E88—8 prongs.....	.36	....

SEE SOCKETS AND SHIELDS
IN NATIONAL AND
HAMMARLUND SECTIONS
FROM PAGES 90 TO 98

Electrical Equipment and Installation Aids

HANDY TOUCH-UP KIT



With this kit you can do a real job in removing scratches from cabinets..\$7.80

Handy Scratch Remover (stick form)\$0.60

Radio Cleaner Polish, 12-oz. bottle\$0.80

RCA CABINET Refinishing Kit

Packed in a durable leatherette case 9½x4½x2½ inches, you will find everything needed to re-finish or repair most marring cabinets. Something every radio shop and serviceman should have. No. 9546.....\$5.80



SERV-U-FONE SYSTEMS



For offices, factories and homes. Made by company with 40 years' experience in designing and constructing telephone systems. These phones are not designed for connection to public exchange systems. Real clear speech with good volume are obtained with Serv-U-Fones. Fully guaranteed.

TWO STATION SYSTEM (Green Label)

Two wires are required between phones and two dry cells at each telephone. Each telephone is furnished complete with terminal strip, 50 ft. of single conductor interior wire and full instructions. No. RP128—Desk type. Each.....\$6.00
No. RP126—Wall type. Each.....6.00

THREE STATION SYSTEM (Red Label)

The master station can selectively call either of the two outlying stations. The outlying stations can only signal central station and calls between outlying stations must pass through the central station. 4-wire line required. Complete instructions furnished.

No. RP127—Master Desk Phone. Each.....\$9.00

No. RP133—Outlying Desk Phone. Each.....\$7.20

No. RP132—Outlying Wall Phone. Each.....\$7.20



SNAP-IT NITE LITE

A very handy item. Has adjustable shade, switch in the base and plugs into any outlet. Comes complete with a genuine mazda lamp.

No. 2100.....\$0.58

FLUSH TOGGLE SWITCH

Bakelite construction. This is a small, shallow size switch rated at 10 amperes, 125 volts. Approved at 1,500 watts. Fine for transmitters.

No. M211.....\$0.24



BAKELITE HEAVY DUTY CUBE TAPS

No. 780—List each.....\$0.12

UNBREAKABLE RUBBER HANDLE CAP

No. 121—Med. size\$0.08
No. 117—Large size\$0.14



BAKELITE HANDLE CAP

No. 701\$0.08

BAKELITE CONVENIENCE OUTLETS

Fasten to wall with a single screw. A handy item.

No. 728—Single outlet.....\$0.18
No. 739—Double outlet.....\$0.20



BAKELITE ANGLE-LITES

No. 700—Twin-Lite\$0.24
No. 708—Triple-Lite\$0.48

FUSED CUBE TAP

Overloads or shorts will blow fuses in the tap and protect the house line. Equipped with two standard fuses.

No. 788.....\$0.44
Fused Handle Cap.
No. 789.....\$0.44



110 V. PILOT LITE RECEPTACLE



Fine for service benches and transmitters.

No. 153 — Small size\$0.70

RED BULL'S EYE

For use with above receptacle.

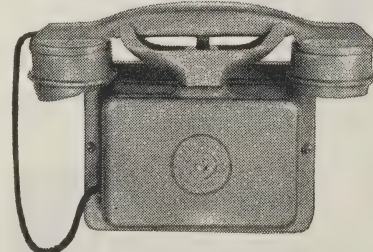
No. 156—1x1½ in..\$0.24



"O. K." FUSES

As illustrated, you can see at a glance when a fuse is "shot." Sizes 10, 15, 20, 30 amps.

Box of five.....\$0.50



Write for the complete Serv-U-Fone Catalog. Describes these systems and larger stations.

Serv-U-Fones have many fields of use. Sell them to offices, factories, homes, summer resorts, doctors' offices, schools. Serv-U-Fones offer profit opportunities to live-wire radiomen.

"D-N LIST"

SOCKET AND PLUG

The handiest and neatest way to connect A.C. to a receiver or transmitter!



The socket countersinks into appliance with a nicked mounting ring flush. The plug is connected to A.C. cord and plugs right into the socket. When appliance is disconnected from the A.C., there is no A.C. cord left dangling to get in the way. Especially desirable for transmitters.

No. HHS-100—Socket.....\$0.30

No. HHP-101—Plug.....\$0.60



WEST BEND Aluminum Electric Glow Lamps

Satin finish—9 inches high—shade tilts to any angle. Very attractive—nice for that desk in the "Ham Shack."

No. 472—Blue enamel trim. List.....\$2.10
No. 4470—Copper finish. List\$2.10

EAGLE ELECTRIC DESK LAMP

Flexible arm, 12-in. goose-neck, heavy cast-iron base, large size reflector with turn-knob socket.

No. 395—List\$2.20



EXTENSION CORDS



Cube tap one end—rubber handle cap on other. Approved A.C. cord.
No. 785-6—6 ft. List \$0.50
No. 785-12—12 ft. List\$0.60

UTILITY EXTENSION CORD

10 feet of heavy duty rubber service cord, rubber handle cap and strong connector. Just the thing for electric refrigerators.

No. 195—List\$0.90



RUBBER TROUBLE LAMP

With Wire Guard

Useful in car radio service. A real heavy duty trouble lamp. Heavy ¾-inch rubber cable with a strain relief disc to prevent wire from pulling out. Not a cheap lamp.

No. 427-12—12 ft. long.....\$1.40

No. 427-20—20 ft. long.....\$1.80

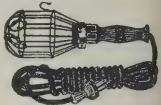
No. 427-25—25 ft. long.....\$2.00

Same type lamp with A.C. line switch in handle.

No. 493-12—12 ft. long.....\$1.70

No. 493-20—20 ft. long.....\$2.10

No. 493-25—25 ft. long.....\$2.30



BELDEN CORD SETS



Real heavy duty heater cord sets. 5½ ft. approved cord, rubber cap and bakelite plug.

No. 1722.....\$0.70

No. 1723—Same with switch in plug\$0.90

2 - 150T	49.00
2 - 838	32.00
1 - 250	1.30
4 - 83	2.00
2 - 866	3.50
1 - 89	.75
3 - 76	1.20
2 - 801	9.00

FTP 44

FTP 95

FTF 46

FTF 71

FTC 3

FTC 4

3000 V Cond (2)

2 selects 20 W (4)

Crystal

Neoprene

Mod. 2 pin, Cond fm

79.75

25.00

7.50

2.60

9.00

8.00

18.60

16.00

20.00

3.00

4.80

12.00

219.75

AERIAL ACCESSORIES

RADIO CONVENIENCE OUTLETS



This is a new line which is offered to the Radio Trade for the first time in this catalog. The pictures shown illustrate the beauty and up-to-date convenience these outlets offer. The plates are of the best quality bakelite. Notice that the contacts are polarized—no mistakes can be made. You will find this new system is a great improvement over the old pin-plug and jack system. We earnestly recommend that you try these outlets. We'll gladly refund your money. If you don't say they are the best you've ever seen.

No. 4504B—Brown bak. duplex radio outlet complete with wall plate, box divider and radio cap.....\$1.60
No. 4504I—Same in ivory.....2.00
No. 4505B—Brown bak. triplex radio outlet complete with wall plate, box divider, radio cap and two attachment plug caps\$2.10
No. 4505I—Same in ivory.....2.70



Van's Aerial Eliminator. Works good.
No. V-1A\$1.20

VAN'S INTERFERENCE DEVICES

Junior Silencer— $\frac{1}{2} \times 1\frac{1}{4}$ ins.—eliminates radio interference from electrical appliances such as fans, vacuum cleaners, mixers, etc. Full instructions furnished.
No. V-JR\$0.90
Model C Silencer— $1\frac{1}{2} \times 2\frac{1}{4}$ ins.—for larger appliances such as oil burners, farm light plants, elect. tools, cash registers, Neon signs, etc. Full instructions furnished.
No. VC-1F\$1.80
Senior Silencer— $1\frac{1}{2} \times 2\frac{1}{4} \times 4\frac{1}{4}$ ins. Capacity-inductive type incorporating 2 special chokes and 4 H. F. capacitors. Very efficient on Neon signs, oil burners, or any case of extremely bad interference. In metal box.
No. V-SR\$6.90



Ideal for apartment house installations—metal container—with instructions.
No. FE-58\$0.58

AERIAL SPRING ADJUSTER



Eliminates sag in antennas. As shown.
No. BAS-60.....\$0.60

SEE AERIAL WIRE
ON PAGE 40
SEE S. W. AERIALS
ON PAGES 42-43

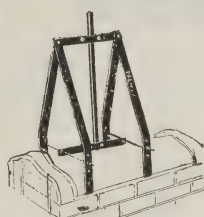
PREMAX Telescoping Tubular STEEL MASTS

All-wave sets demand antennas. These masts meet every demand for a strong, inexpensive, weatherproof and good-appearing aerial support. Premax masts are made up of tubular steel sections — telescoping within each other. Can be firmly locked at any adjustment. Sections are uniform and interchangeable permitting any mast to be made into a longer length by the addition of another base section. For lengths above 13 feet one or more tubular steel extensions (X-3) may be added to the base of the M-156 mast. Come complete with necessary fittings.

No. M-42—Single sec. mast. Length 3 $\frac{1}{2}$ ft. Weight, 2 lbs.....\$1.20
No. M-84—Two sec. mast—7 ft.—5 lbs.....2.10
No. M-120—Three sec. mast—10 ft.—7 lbs.....3.30
No. M-156—Four sec. mast—13 ft.—10 lbs.....4.50
No. X-3—Sectional extension—3 ft.—2 $\frac{1}{2}$ lbs.....1.20
Extra base flanges with bolt—per pair 18
Individual sections—B-C-D. Ea... 1.20



PREMAX PARAPET MAST SUPPORT



Just the thing for those tough apartment house installations. No holes to drill—no nails to drive. Fits any parapet or fire wall up to 20 ins. Holds round masts from $\frac{1}{2}$ ins. to 2 ins. or square up to 2x2 ins. Weight, 8 lbs.
No. PS-18...\$3.00

PREMAX TRUSS BRACE

An arrangement that permits locating masts at extreme end of roof. Fits round masts from $\frac{1}{2}$ to 2 ins.—square up to 2x2 ins. Length 24 ins. Weight, 2 lbs.
No. TB-24—Each...\$0.90



ANTENNA TENSION INSULATOR

An insulator and a heavy spring. Attaches to any style mast.
No. TI-1—Each...\$0.12



PREMAX MASTS

Illustrated on right. Made of solid $\frac{3}{4}$ in. rod—rust-proof finish. Adjustable base. Large double-grooved insulator. 3 $\frac{1}{2}$ ft. high.

INSULATOR BRACKET

Formed steel arm—8 ins. long—with white porcelain insulator that can be used in 3 positions.
No. IB-8.....\$0.36

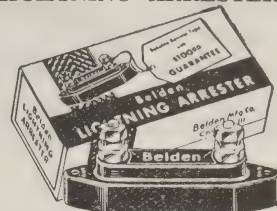
GALVANIZED GUY WIRE

50 ft. steel wire—non-stretching.
No. G-50—Per coil.....\$0.30

RED WING "AERIAL" INDOOR AERIAL

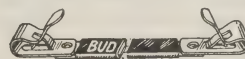
Something brand new—and better. A capacity condenser type aerial—especially designed for improved reception in steel buildings. Made of six strips of .005-in. thick annealed copper 2-in. wide—each strip 4 ft long. Goes under rug. Not a "trick connection to ground" aerial, but an engineered product that will really "get the signals."
No. LRW\$3.90

LIGHTNING ARRESTERS



Belden bakelite, \$100.00 insurance, convenient small size. A real, high quality arrester.

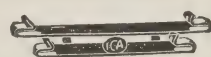
No. 8950—Each\$0.30
Eagle Arrester. Approved.
No. E261—Each 18
Bonn "Special" Arrester.
No. SP12—Each 12
10 for 1.00



WINDOW LEAD-IN STRIPS

12-in. soldered lacquered, weatherproof.
No. C780—Each\$0.09
12 for 1.00

DOUBLET LEAD-IN STRIPS



No. 1509—Each\$0.18



NOC-OUT GROUND CLAMPS

No. KO-10—Each....\$0.10
10 for 90

CLAMPIPE GROUND CLAMP

No. M58—Each....\$0.10
10 for 90

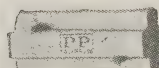


9-IN. COPPER STRAP GROUND CLAMPS

No. C708—Each\$0.06
10 for 50



No. C-1— $\frac{3}{4}$ -in. Glass Insulator—special tempered—finest quality. Each....\$0.08
10 for 84
50 for 2.90
No. 8118— $\frac{2}{3}$ -in. Brown Glazed Porcelain Insulator—the heavy duty type.
Each\$0.06
10 for 46
50 for 2.00



WET PROCESS QUALITY STRAIN INSULATOR

A new and handy item.
No. PP2588. Each.....\$0.08

SCREW-EYE INSULATORS

Center of porcelain-mounted in galvanized screw-eye.

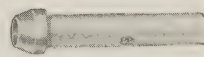
No. P1926—3-in.....\$0.60
10 for 60
No. P1925—7 $\frac{1}{4}$ -in. 08
10 for 70
No. P1924—12-in. 18
10 for 1.50



NAIL-IT KNOBS

Glazed Porcelain
No. P-01—Ea. \$0.04
10 for.....36
100 for.....3.40

PORCELAIN WALL TUBES



No. P-02—6 ins. long, 5/16-in. hole.
Each\$0.06

BELDEN-Aerial-Hook-up-Electrical-WIRES

PLAIN AND ENAMELED ANTENNA WIRE



Guaranteed
Full Lengths
Full Sizes

PLAIN

100 ft. 7 strand No. 14 (22).....	\$0.60
75 ft. 7 strand No. 14 (22).....	.46
100 ft. 7 strand No. 16 (24).....	.48
75 ft. 7 strand No. 16 (24).....	.34

ENAMELED

100 ft. 7 strand No. 14 (22).....	\$0.84
75 ft. 7 strand No. 14 (22).....	.68
100 ft. 7 strand No. 16 (24).....	.70
75 ft. 7 strand No. 16 (24).....	.54

SOLID ENAMELED

100 ft. No. 12	\$1.00
150 ft. No. 12	1.50
200 ft. No. 12	2.00
300 ft. No. 12	3.00
100 ft. No. 14	.68
150 ft. No. 14	1.02
200 ft. No. 14	1.36
300 ft. No. 14	2.04

No. 10 gauge, solid enameled wire, 100 feet—only size carried.....\$1.80
No. 8 gauge, solid enameled wire, cut lengths. Per ft.....\$0.05

COPPERWELD ENAMEL

Has steel core with copper welded on outside. Is the perfect wire for transmitting antenna as it will not stretch even 1%. No regular copper wire compares with copperweld.

No. 12 gauge, enameled copperweld wire, 100 feet	\$1.80
150 feet	2.70
200 feet	3.60
300 feet	5.40

SPECIAL

75 ft. special, 7-strand 12 gauge (20) enameled wire specified by Philco for all wave aeriels.....	\$1.30
100 ft. special, as above.....	1.70

On all above wires you may deduct 10% from your net cost if you purchase in 10 coil lots or 1,000 foot spool.

★ OUR BEST SELLER ★

Here is the handiest all-purpose wire on the market. Use it for car radio aeriels, inside or outside lead-ins, hook-up wire, etc.

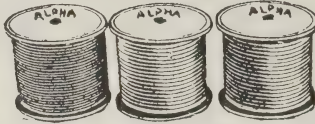
No. 18—16 strand, tinned, shiny black rubber covered with cotton serving inside. 1/64-in. insulation. Include a coil or spool on your next order.

1,000-ft. spool No. 18—16.....	\$6.80
250-ft. coil No. 18—16.....	1.90

The same wire as above in No. 16 gauge, 24 strand, with 1/32-in. insulation.

500-ft. spool No. 16—24	\$5.40
250-ft. spool No. 16—24.....	2.90
50-ft. coil No. 16—24.....	.60
35-ft. coil No. 16—24.....	.50

HOOK-UP WIRE



No. 1SO22—50 ft. 22 gauge solid tinned copper. Double braided, easy push-back, lacquer finish, a real quality wire. Colors: Red, Black, Green, Yellow and Blue. Each\$0.40
Five coils for 1.80

No. 1ST22—25 ft. 22 gauge stranded tinned copper. Double braided, push-back, lacquer finish. 5 colors. Each.....\$0.24
Five coils for 1.00

No. 9830—No. 18 stranded tinned copper, 1/32" R. C. with a real heavy braid over-all thickly lacquered. This is a fine wire for high voltage work in Xmters. 40-ft. spool. Five colors. Ea. \$0.78

No. 9827—No. 14 stranded copper wire, 3/64" R. C. with braid over-all, this is an ideal heavy duty filament wire. 35-ft. spool. Black. Each.....\$0.78

BELDEN MAGNET WIRE



Size	Double Enam.		Double Cot. Cov.		Double Silk Cov.	
	1/4 Lb.	Spools	1/4 Lb.	Spools	1/4 Lb.	Spools
14.....	\$0.28	.....	.....	.....	.....	.....
16.....	.30	.....	.....	.....	.....	.....
18.....	.32	.....	.40	.....	.52	.....
20.....	.32	.....	.44	.....	.58	.....
22.....	.34	.....	.48	.....	.68	.....
24.....	.38	.....	.52	.....	.80	.....
26.....	.40	.....	.62	.....	.94	.....
28.....	.42	.....	.72	.....	1.08	.....
30.....	.46	.....	.84	.....	1.40	.....
32.....	.52	.....	1.02	.....	1.60	.....
36.....	.76	.....	1.60	.....	2.60	.....

Table Showing Feet Per Pound of Above Magnet Wire

Gauge	Double Cotton Covered		Plain Enameled		Double Silk Covered	
						
14 .....	.....	80	.....	.....	.....	.....
16 .....	.....	125	.....	.....	.....	.....
18	192	202	.....	199	.....	.....
20	298	319	.....	314	.....	.....
22	464	506	.....	494	.....	.....
24	711	804	.....	778	.....	.....
26	1,080	1,280	.....	1,220	.....	.....
28	1,630	2,030	.....	1,910	.....	.....
30	2,420	3,220	.....	2,960	.....	.....
32	3,500	5,100	.....	4,570	.....	.....
36	6,660	12,800	.....	10,500	.....	.....
.. .....	.....	20,300	.....	15,500	.....	.....
.. .....	.....	32,100	.....	.....	.....	.....

SOLID LEAD-IN WIRE

VALUE-PLUS

50-ft. coils No. 16 gauge cotton serve. Heavy braid overall. Paraffined dipped.

Per coil	\$0.24
Ten coils	2.20
Twenty-five coils	5.00
Fifty coils	9.00

SHIELDED LEAD-IN WIRE

Stranded tinned copper wire, 1/32" rubber insulation with tinned copper shield over-all.

No. SL-18—18 gauge. Per ft.....	\$0.03
100-ft. spool	2.00
No. SL-16—16 gauge. Per ft.....	.04
100-ft. spool	3.00



"D-N LIST"

CENTER-RIP A. C. CORD

Rubber covered with each conductor separately insulated; splits down center when pulled apart. Conductors are 18 gauge with cotton serve. Black or brown. No. PO-SJ—Per ft.\$0.03
250-ft. spool 6.30

RUBBER COVERED A. C. CORD

A heavy duty utility wire, No. 18 gauge, each wire separately insulated with cotton serve and rubber. Heavy rubber insulation over-all in black or brown. No. TOKEN. Per ft.....\$0.05
10 ft. for 36
250-ft. spool 8.00

COTTON LAMP CORD TWISTED PAIR



Each conductor No. 18 stranded copper, cotton served, rubber covered with a heavy cotton braid over-all. Black with tracer. 1/32" R/C. No. TPAC. Per ft.....\$0.04
10 ft. 30
250-ft. spool 7.20

PARALLEL SILK CORD

Each conductor No. 18 stranded copper, cotton served, 1/32" rubber insulation with heavy silk braid over-all. Brown only.

No. PSAC. Per ft.....	\$0.04
10 ft.	.36
250-ft. spool	8.00

COPPER SHIELDING BRAIDS



Heavy Duty—Tinned.

Cat. No.	Diam		Wide		10 Ft. 50 Ft.	
	Open	Flat	.....	.....	For	For
CS3-16	1/4"	3/16"	.....	.....	\$0.50	\$2.00
CS1-4	3/8"	1/4"	.....	.....	.60	2.70
CS3-8	1/2"	3/8"	.....	.....	.80	3.40
CS1-2	3/4"	1/2"	.....	.....	1.20	5.00

SHIELDED WEATHERPROOF LOOM



Heavy impregnated loom tubing covered with tinned copper shielding braid. 1/4" I. D.—5/16" O. D. Per foot....\$0.10
1/2" I. D.—9/16" O. D. Per foot....14



LOW CAPACITY SHIELDED CABLE

For auto aerial lead-in. No. 18 stranded copper. Rubber insulated, jute filler with tinned copper sleeving over-all. Permits shield grounding without signal loss.

No. L1195—1/2" O. D. Per foot.....	\$0.14
No. L1197—3/4" O. D. Per foot.....	.09
*No. L1199—5/8" O. D. Per foot.....	.20

*This is same as regular Aerial Cordage except it has a heavy Rubber-Cover Over-all Weatherproof.

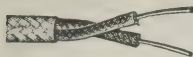
BIRNBACH MAGNET WIRE

\$0.50 Per Spool

Plain enameled, double cotton covered and double silk covered magnet wire put up in proportionate lengths in even sizes from No. 14 to No. 40.

Wires—Shielding—Cables—Magnet—Belden

TWISTED PAIR A. W. LEAD-IN WIRE



Belden wire, specially designed for all-wave reception. Two conductors No. 20 tinned stranded copper, paper wrap, 1/32 in. rubber wall, overall braid of black cotton, waxed, color-coded.
No. 8834—80-ft. coil\$1.80
Per ft., cut lengths—\$.025.
500-ft. spool 10.50



Twisted pair, No. 18 stranded copper wire, 1/32 in. rubber insulation; a good weatherproof wire.
No. AW1135—Cut lengths. Per ft. \$0.022
50-ft. coil...\$1.00 80-ft. coil.. 1.50
110-ft. coil... 1.90 500-ft. spool 9.00

INDOOR AERIAL WIRE

Used on AC, DC radio sets. Extremely flexible. Will not kink—brown cotton braid.

No. L1090—60-ft. coil\$0.60
No. L1091—125-ft. coil 1.00



Twisted Lead-in wire, solid—for Xmtrs. Belden—Low, loss No. 19 solid Belden-amenel with two serves of cotton, color-coded with waxed cotton braid overall. Fine for low power Xmtrs.
No. 8844—Per ft.\$0.016
50-ft. coil 66

LYNCH DUOTRAN CABLE FOR XMTRS

This is a heavy duty R. F. Xmission line feeder cable. Weatherproof, low-loss, with low R. F. resistance for matched, impedance, doublet Xmtg. Antennas, up to 1 K.W.
No. EO-1—Per ft.\$0.14
100 ft. or over, per ft. 12

ANALYZER CABLE

8 and 9 conductor. Has two heavy leads for filament circuits. Heavy black glazed braid with red tracers over-all.
No. 8958—8 conductor. Per ft.\$0.14
No. 8959—9 conductor. Per ft. 16

RADIO BATTERY CABLE

Has two heavy leads for filaments. Wires color-coded. Durable brown braid over-all.
No. 1150—5 conductor. Per ft.\$0.08
No. 1151—7 conductor. Per ft. 11
No. 1152—9 conductor. Per ft. 14

MULTI CONDUCTOR RADIO CABLE

Cotton Braid—Not Shielded



No. 20 gauge, tinned, stranded copper; 1/64-in. rubber, cotton braid, lacquer dipped, color coded, with brown cotton braid overall.
No. 1320-2—Two-wire, 10 ft. for....\$0.36
No. 1320-3—Three-wire, 10 ft. for... .60
No. 1320-4—Four-wire, 10 ft. for.... .70
No. 1320-5—Five-wire, 10 ft. for.... .80
In 100 ft. lengths or over you may deduct 10% from your net cost.

MULTI CONDUCTOR SHIELDED CABLE



No. 20 tinned stranded copper paper wrap, 1/64 in. rubber, color-coded, lacquered cotton braid with tinned copper shield overall.
No. 8962—2-wire. Per ft.\$0.05
100-ft. spool 4.70
No. 8963—3-wire. Per ft. 07
100-ft. spool 6.00
No. 8964—4-wire. Per ft. 10
100-ft. spool 8.00
No. 1320S—5-wire. Per ft. 12
100-ft. spool 9.00

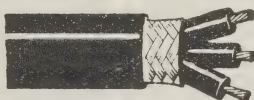
MULTI CONDUCTOR RUBBER COVERED

No Shield.



No. 18 stranded copper, cotton serve 1/64 in. rubber, color-coded, with filler, cotton braid, heavy rubber coat overall.
No. 8972—2-wire. Per ft.\$0.05
No. 8973—3-wire. Per ft. 08
No. 8974—4-wire. Per ft. 10
100-ft. coil 9.50
This 4-wire cable is ideal for speaker work on P. A. jobs.
No. 8975—5-wire. Per ft.\$0.12

MULTI CONDUCTOR SHIELDED AND RUBBER COVERED



For all microphone use and for particular installations of speakers, remote lines and photo cell work. This is the finest grade of wire, 13x36 tinned copper, two serves of celanese, two braids of celanese, four braids of cotton, waxed; tinned copper shield; heavy rubber cover overall.

No. 8924—1 wire, for crystal, single button and ribbon mikes. Per ft.\$0.06
100-ft. spool 5.00
No. 8948—2-wire, for P.P. crystal, double-button carbon, photo-elec. cells and circuits using two ribbon mikes with shield acting as one conductor. Per ft.\$0.12
100-ft. spool 8.40
No. 8877—2-wire, each conductor 26x34 tinned copper; rubber wall color-coded; cabled and cotton wrapped; tinned copper shield; cotton wrap over shield and rubber sheath overall. For 2-button mikes, transmission lines and remote control work. Per ft.\$0.06 1/2
100-ft. spool 6.00
No. 8874—3-wire, same construction as No. 8877—for carbon mikes which do not employ a grounded center tap or which couple to a mixer panel. Per ft.\$0.08
100-ft. spool 7.50
No. 8846—4-wire, same as No. 8877—for dynamic mikes and speakers with independent field circuits. Per ft.\$0.10
100-ft. spool 9.00
No. 8928—5-wire, same as No. 8877—for condenser mikes with pre-amp in head. Per ft.\$0.12
100-ft. spool 10.50
No. 8847—6-wire, same as No. 8877. Per ft.\$0.14
100-ft. spool 12.00
No. 8927—7-wire—same as No. 8877—good analyzer replacement cable. Per ft.\$0.16
100-ft. spool 13.50

MULTI CONDUCTOR COTTON BRAID OVERALL SHIELDED



No. 20 tinned stranded copper; 1/16 in. rubber wall; lacquered cotton braid; tinned copper shield with durable brown cotton braid overall.
No. 1320SW-2—2-wire; can be used as double button mike cable using shield as ground. Per ft.\$0.06
100-ft. spool 4.80
No. 1320SW-3—3-wire. Per ft. 08
100-ft. spool 7.60
No. 1320SW-4—4-wire. Per ft. 10
100-ft. spool 8.80

ANTENNA KITS

For Broadcast Reception Four Standard Kits

No. 100\$1.00
75 ft. 7 No. 24 plain.
35 ft. No. 16 solid R/C.
2 Brown Porc. Insulators.
1 12-in. Window Lead-in Strip.
1 9-in. Copper Strap Ground Clamp.
2 Nailits.
1 Approved Arrester.
No. 200\$1.40
75 ft. 7 No. 22 plain.
50 ft. No. 16 R/C.
1 Belden Arrester.
2 Brown Porc. Insulators.
1 12-in. Window Lead-in.
1 Nocout Ground Clamp.
2 Nailits.
No. 300\$1.70
100 ft. 7 No. 22 plain.
50 ft. No. 16 R/C.
2 3 1/2-in. Glass Insulators.
1 12-in. Window Lead-in.
1 Nocout Ground Clamp.
2 Nailits.
1 Belden Arrester.
1 6-in. Screw Eye.
No. 400\$2.00
100 ft. 7 No. 22 Enamel.
50 ft. No. 16 R/C.
2 3 1/2-in. Glass Insulators.
1 12-in. Window Lead-in.
1 Nocout Ground Clamp.
2 Nailits.
1 Belden Arrester.
1 6-in. Screw Eye.

GRID BIAS TABLE

Tube	Use	Plate Volts	Bias Res.	
			Ohms*	Watts
27	Amp.	135	2,250	1
27	Amp.	180	2,500	1
27	Det.	250	150,000	1
45	Amp.	180	1,000	10
45	Amp.	250	1,500	10
2A3	Amp.	250	750	10
2A5	Amp.	250	400	10
47	Amp.	250	500	10
38	Amp.	135	1,250	2
38	Amp.	180	1,100	2
38	Amp.	250	1,000	2
41	Amp.	135	700	2
41	Amp.	180	600	2
41	Amp.	250	500	10
57	R. F.	250	1,200	1
57	Det.	250	60,000	1
58	R. F.	250	300	1
24A	R. F.	250	500	1
24A	Det.	250	50,000	1
35	R. F.	250	400	1
76	Amp.	250	5,000	1
76	Det.	250	100,000	1
77	R. F.	250	1,000	1
77	Det.	250	40,000	1
78	R. F.	250	350	1
6C6	R. F.	250	1,250	1
6C6	Det.	250	60,000	1
6D6	R. F.	250	300	1

Values shown are for single tubes. For tubes in push-pull use a resistor having half of the resistance value shown; wattage dissipated under push-pull conditions will be twice as much as for a single tube.

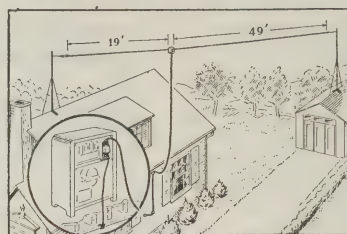
SHORT WAVE AND



A scientific all-wave antenna system for receivers of all types and manufacture. Complete, wired, ready to install. No assembling or parts required for immediate installation. The new RCA RK-40 Antenna is a simplified antenna system designed to reduce the time and labor required for antenna installation in the most difficult of locations. It is merely necessary to attach each end to supports and make connections to the receiver. The time and money saved by installing this easily erected antenna means more business and more profits for you. The low price enables you to sell it to customers of more modest incomes. RCA design means more signals for your customers and better acceptance everywhere. Cash in on this improved, easily erected RCA Antenna by recommending it to your customers.

HOW IT WORKS

The RCA RK-40 Antenna consists of an unbalanced doublet, a transposed transmission line, an antenna junction box and a receiver coupling unit. The antenna acts as an efficient pick-up medium, giving high signal strength over an extremely wide frequency range. The transmission line efficiently conveys this energy from the antenna to the receiver, while the



NEW! NEW!
RCA RK-40
Scientific
ALL-WAVE
ANTENNA

Complete—
Ready to Install

\$6.60

receiver coupling unit matches the transmission line to the input receiver circuits. Such a system gives adequate coverage of all short and long-wave broadcast bands and presents a minimum in installation work in conjunction with its erection.

HERE'S WHAT YOU GET:

- 1 Antenna Assembly comprising:
 - (a) Antenna Wire Coil 19 feet long with Strain Insulator attached.
 - (b) Antenna Wire Coil 49 feet long with Strain Insulator attached.
 - (c) Transmission Line Coil of Special two conductor insulated cable 75 feet long.
 - (d) Hermetically Sealed Junction Box to which the two antenna wires and the transmission line are connected.
- 2 Receiver Coupling Unit with two links for attachment to "Ant." and "Gnd." terminals or clips on radio receiver.
- 3 Two Nail-on Porcelain Knob Insulators for carrying transmission line on side of building or other supporting surface.
- 4 Porcelain-tube Lead-in Insulator for entrance of transmission line into building.
- 5 Ground Clamp for attachment of ground wire to water pipe or to stake driven 5 to 8 feet into the soil.

No. 9631 **\$6.00**

CORWICO AUTOMATIC NOISE-MASTER



This kit is recommended in locations where there are sufficient "man-made" noises to interfere with radio reception over both the short-wave and broadcast bands. A highly engineered product which makes one aerial act electrically as two perfect antennas, by automatically selecting the varying frequencies of short-wave and broadcast signals. Two or more sets (preferably not more than four) can be operated at the same time, on the same antenna, by using an additional lower transformer unit on each additional

national set. This kit assures highest possible efficiency in eliminating "man-made" static over the entire radio receiving band.

CONTENTS:

- | | |
|---|-------------------------------|
| 2—30-ft. coils 7/24 stranded copper antenna wire. | 1—No. 755 dual lead-in strip. |
| 1—Upper transformer unit. | 1—Lower transformer unit. |
| 2—Glass insulators. | 1—4-in. porcelain tube. |
| 50-ft. twisted pair down lead. | 1—Instruction sheet. |
| 3—6-in. screw eye insulators. | |

No. C14 **\$8.10**

CORWICO "V" TYPE DOUBLE-DOUBLET (RCA No. 9500 Type) ALL-WAVE ANTENNA

31 ft. of antenna wire on each side of cross-over insulator with 16 feet in each "V." A very successful type of all-wave antenna. Completely factory assembled.

CONTENTS:

- | | |
|---|-------------------------------|
| 2—47-ft. coils 7/24 stranded copper aerial wire. | 1—Upper transformer (aerial). |
| 4—Porcelain insulators. | 1—Lower transformer (set). |
| 1—Triangular porcelain center insulator. | 1—Instruction sheet. |
| 80 ft. No. 120 stranded twisted pair down lead (connected at center insulator to aerial wire, as indicated in diagram.) | |
| 35 ft. coil No. 18 stranded rubber covered ground wire. | |
| 1—No. 755 dual lead-in strip. | |
| 1—4-in. porcelain tube. | |
| 3—6-in. screw eye insulators. | |
| 2—No. 713 "C" type ground clamps. | |

No. C17 **\$8.20**

SECURITY ALL-WAVE ANTENNA

A well built Doublet type antenna. As illustrated. Contains 2—40-ft. coils 7/24 antenna wire, 3 glass insulators, 50 ft. of twisted pair lead-in, 3—6-in. screw eyes, 1 porcelain tube, 1 double lead-in strip and 1 matching transformer.

No. B112X—Complete **\$3.95**



GENERAL INFORMATION

Reception of short-wave stations depends on several factors: the wave length, the amount of interference present, and the antenna system. With the proper antenna system, satisfactory short-wave reception is possible, when the wave length of the station is considered. This is of prime importance due to the peculiarities of short waves. By consulting various periodicals, the proper hour for each wave length can be ascertained in order to insure reception, as some wave lengths cannot be received at certain times of the day or year.

Noise is often picked up by the lead-in of the antenna. Most interference picked up this way radiates from the ground up. By locating the antenna as high as possible above the ground, the amount of interference or man-made static can be reduced to a minimum by using a transmission line from the flat top portion of the antenna to the receiver, and eliminating the ground as a part of the signal collecting system.

During the last few years, as short-wave reception has become a certainty, different antenna systems have been tried in an attempt to increase the reliability and reduce interference (man-made). The doublet antenna has been proven by repeated experiments to be ideal in this respect, both in reducing interference and increasing signal strength.

The doublet system is an antenna divided in the centre by an insulator, and having a transmission line connected with each section, which in turn terminates in a coupling device. This coupling device permits the termination of the transmission line in such manner that the antenna is not grounded.

The usual All-Wave Antenna Systems consist of a doublet antenna with a transmission line terminating in an ALL-WAVE COUPLER. The ALL-WAVE COUPLER permits the proper coupling to all sets without removing the ground wire or disturbing any of the wiring of the receiver. The purpose of the transmission line is to nullify any noise picked up by the lead-in. Interference picked up by one side of the line is nullified by that picked up by the other side. The antenna is doubled at the centre by the insertion of an insulator to balance the system so that equal strength will be collected by each portion.

Locate the flat top portion of the doublet antenna as high and as far as possible from all surrounding buildings and other objects. The length of each side of the doublet antenna should be thirty-three feet for best average results for all-wave reception. The exact length of the flat top of each portion for reception on any special frequency can be ascertained by multiplying the wave length by .78, or referring to the table below which lists the most used frequencies. For reception on broadcasts, the harmonic relationship will afford satisfactory results.

Wave Length	Freq. in KC	Length of Each Side of Doublet	Wave Length	Freq. in KC	Length of Each Side of Doublet
16	18,620	12.5 ft.	40	7,496	31.25 ft.
19	15,780	14.8 ft.	50	5,996	39 ft.
20	14,980	15.5 ft.	60	4,997	46.8 ft.
26	11,990	19.5 ft.	80	3,748	62.5 ft.
31	9,672	24 ft.	160	1,874	125 ft.

CORWICO ALL-WAVE ACCESSORIES

You will find that the use of these scientifically designed impedance matching transformers will improve the results on any all-wave system.

No. C126—The variable feature of this transformer enables the matching of the impedance of any doublet antenna to that of any radio set, thus insuring perfect reception when used with doublet antennas of the ordinary design. Simply connect the red and black wires to antenna and ground binding posts. Connect the twisted pair down lead to the short pigtail, and adjust the knob for maximum signal strength and minimum noise disturbance. "SILENCER"..... **\$3.00**

No. C125—Matching Transformer—used at set. Optional leads for matching the set impedance of different radio receivers..... **\$1.00**

No. C14A—Kit containing upper and lower transformers—same as used in Corwico Noise-Master All-Wave Kit.... **\$6.00**

No. C127—Extra lower transformer..... **2.70**



ALL WAVE AERIAL SYSTEMS

"No Radio is Better than its Aerial"

LYNCH ANTENNA SYSTEMS

The Arthur Lynch Co. has been a real leader in the presentation of short-wave and all-wave aerial systems. You will find listed below all of the latest Lynch antennas. (All Arthur Lynch antenna devices are licensed under A. K. K. patents.)



LYNCH Assembled HI-FI ALL-WAVE ANTENNA SYSTEMS

Noise reducing on all waves; efficient on all waves. Completely factory wired—just string up between masts. These are the new 1936 models and results will amaze you.

"JUNIOR" SYSTEM

Consists of:
1 Hi-Fi Coupling System with 50-ft. Twisted Pair Transmission-Line.
41-ft. Doublet 7/22 Copper Wire.
2 Commercial Type Insulators.
1—3-inch Emily Screw Eye.
2 Nailit Knobs.
1—4-inch Porcelain lead-in tube.
No. 1150—With 50-ft. twisted pair lead-in.....\$8.10
No. 1151—With 100-ft. twisted pair lead-in..... 9.90

"STANDARD" SYSTEM

Consists of:
1 Hi-Fi Coupling System with 50-ft. Giant Killer Cable.
41-ft. Doublet, made of Heavy Hi-Mho Wire.
2 Navy Type Insulators.
1—3-in. Emily Screw Eye.
2 Nailit Knobs.
1—4-inch Porcelain lead-in tube.
No. 1003—With 50-ft. Giant Killer Cable..... \$10.20
No. 1004—With 100-ft. Giant Killer Cable..... 13.80

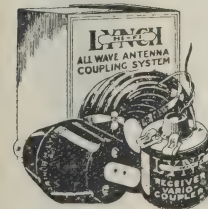
LYNCH HI-FI "SIMPLEX" ALL-WAVE ANTENNA KIT

Is recommended where plenty of space for the horizontal portion of the antenna is available, 125 ft. will be necessary. This kit comprises: 125 ft. Hi-Mho (heavy grade) antenna wire, 35 ft. giant killer cable, receiver varlo-coupler, 3 nailits, 1 porcelain tube, 1 double lightning arrester and complete instructions. This antenna is an "L" type end fed antenna.
No. 1010\$8.40
No. 1011—As above but 50-ft. giant killer cable..... 9.60



LYNCH HI-FI ALL-WAVE "DUPLEX" COUPLING KIT

Is especially suited for use where the area covered by the antenna is limited. Total length of antenna itself is less than 50 ft. The transmission line (giant killer cable) may be any length. Standard kit comprises: 1 Hi-Fi Duplex Ant. coupler, 1 Hi-Fi receiver varlo-coupler and 50 ft. of giant killer cable.
No. 1001\$8.10
No. 1030—Hi-Fi antenna coupling transformer..... \$4.20
No. 1031—Hi-Fi receiver varlo-coupler transformer..... 3.00



LYNCH ANTENNA COUPLERS

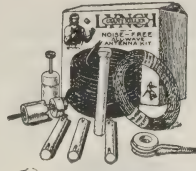
No. 1700—Universal coupler\$1.80
No. 1701—All-Wave coupler (for Nat. SW3-58 receivers)..... \$2.10

SECURITY ANTENNA COUPLER

No. G100X—Universal type\$0.90



LYNCH "GIANT KILLER" KIT



A very popular kit—low priced. Includes all of the basic material for the latest type antenna system and the additional units may be added at any time. Standard kit includes: 35 ft. giant killer cable, 50 ft. Hi-Mho (heavy grade) ant. wire, 3 Lynch commercial type insulators, 1 stand-off, 2 Nailits, 1 porcelain tube and complete instructions.

No. 1040—As listed\$4.20
No. 1041—Same but 50-ft. G. K. Cable..... 5.30

LYNCH BOOSTER COUPLER

As the name implies the Lynch Booster Coupler will increase the signal when used with any doublet system in which an antenna transformer is not used. Especially recommended for use with the Giant Killer All-Wave antenna system.



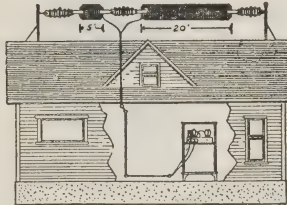
No. 1706\$1.80

LYNCH GIANT KILLER CABLE

Giant Killer Cable is a real heavy-duty cable. It is made up of heavy stranded copper wire, rubber covered, twisted and a rubber cover overall. It is weatherproof and will last considerably longer than other types of twisted pair lead-in wire. Not sold in cut lengths. For receivers and transmitters up to 500 watts.

No. 1060—50-ft. coil\$3.60
No. 1061—100-ft. coil 7.20

VAN'S ALL-WAVE AERIAL



The Van's All-Wave Aerial gives maximum efficiency on all wave-bands together with reduction of external noises on both standard and short wave frequencies. By the use of a special mesh band the total length of the aerial is reduced to twenty-five feet, resulting in ease of installation with improved performance.

The Van's All-Wave Aerial Kit is supplied complete with twisted pair lead-in and insulators, completely assembled, ready for installation.
No. VD1\$5.90

VAN'S SUPER-X ALL-WAVE

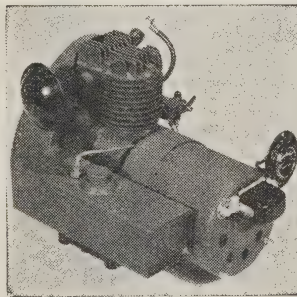
Aerial eliminator, an efficient device particularly suited for apartment house and transient travelers who do not have time or the necessary space to erect an outside aerial.

No. VSX-1\$1.20



PIONEER POWER SYSTEMS

Push Button
Starting
NEW!



Furnishes lights for the house and barn. Charges batteries. Air cooled, 4 cycle, single cylinder $\frac{3}{4}$ H. P. at 3,600

R. P. M. Economical operation—fuel consumption 1 gallon in 15 hours at 150 watts operation. Compact size—11 inches high, 10 inches wide and 17 inches long. Weighs only 50 pounds. (32 and 110 volt plants slightly heavier.) Furnished with ammeter, cutout relay, leads and battery clips.

Type	Watts Output	Price
F 6—For charging 6-volt batteries.....	150	\$60.00
F12—For charging 12-volt batteries.....	150	65.40
F32—For charging 32-volt batteries.....	250	72.00
F32R—For operation of 32-volt lights or D. C. appliances.....	250	72.00
F110—For operation of 110-volt D. C. appliances or lights.....	250	72.00

Write for special circulars if interested.

"D-N LIST"

THE "STAR" LINES OF

UNIVERSAL

New Universal Model XX

Two-button; pure gold contacts, stretched duraluminum diaphragm, 200 ohms per button. Frequency range 100 to 4,000 cycles. Low hiss level \$12.00
Model X—Single button; no front bar, same features as Model XX \$9.00



UNIVERSAL MODEL BB

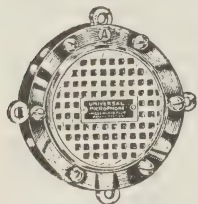
1935 Improved Type

Two-button; extra heavy 24-kt. gold spot, stretched duraluminum diaphragms. New super design. 3-inch dia. 2 ins. thick; weighs 1½ pounds. Frequency response increased. Now 50 to 5000 cycles. 200 ohms per button.....\$30.00



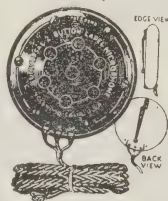
UNIVERSAL MODEL A

Heavy duty single button; 200 ohms. The Model A is furnished in the extra sensitive type and is wonderful for hard-of-hearing work \$18.00



UNIVERSAL LAPEL MIKE

Two-button; thin, compact, light weight. Real broadcast reproduction; very sensitive; 200 ohms per button. Furnished with long, small size leads—not a plaything..\$30.00



UNIVERSAL WATCH MODEL

Microphones

Model Y—Single button; extra sensitive \$2.40
Model W—Single button; extra sensitive; good for detectaphone work, etc. \$3.60



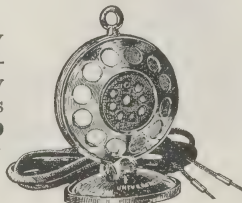
UNIVERSAL HANDIMIKES

Scientifically damped; built for rough, hard usage; good quality. Have "off and on" switch on handle. Equipped with 6-ft. cord. Single button ideal for announcing sports events, call systems, etc....\$12.00
Double button; damped for use close to loud speakers, sound trucks, etc. Very good quality\$18.00



UNIVERSAL ORQ

Single 200 ohm button. Very sensitive. Good frequency response. Not a toy—used by amateurs and on small address systems \$6.00



Model 5M New-Improved

Here's the Unit you have wanted for your 5 and 10 meter portable transmitters and receivers. A good quality-button mike on one end and a sensitive ear phone on the other. French style. Equipped with a long 5-ft. cord.

No. 5M-75S—Single button mike, 75-ohm phone.....\$ 9.60
No. 5M-2000S—Single button mike, 2,000-ohm phone.... 9.60
No. 5M-75D—Double button mike, 75-ohm phone..... 16.80
No. 5M-2000D—Double button mike, 2,000-ohm phone... 16.80

ASTATIC

THE NEW IMPROVED ASTATIC D104 CRYSTAL MICROPHONE

Acclaimed the Most Practical Microphone Increased Frequency Response

No adjustment required.

No carbon rush.

No packing.

No blasting.

No freezing.

No button current.

No field current.

No polarizing voltage.

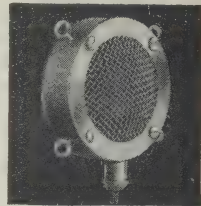
Connects direct to grid or through matching transformers.

Only genuine Brush Bimorph crystals used, output level, —60 db.

Finished in chromium, 3 inches in diameter, 1 inch thick, 8-foot shielded cable.

\$27.00

List price.....



The new, improved Astatic D104 is offered in a 2-wire shielded cable model for use with push-pull amplifiers, 25 feet of shielded cable furnished.

Model D104P—List\$35.00

ASTATIC D104HS HAND TYPE CRYSTAL MICROPHONE

Same microphone exactly as in the new, improved D104, with 8 feet of shielded cable.

D104HS—With handle switch..\$30.60

D104H—No switch..... 30.00



ASTATIC HIGH FIDELITY DUAL DIAPHRAGM CRYSTAL MICROPHONE

Designed so that the forces of two opposed diaphragms are applied to one crystal. Increased output, rated at 64 db. Frequency response is flat

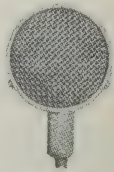
from 20 to 5,000 C. P. S. with a gradual rise to 10,000 C. P. S. Is absolutely non-directional. Comes equipped with substantial locking type plug-in socket, fully shielded. No input transformer needed—connects direct to grid of amplifier. This microphone is recommended for broadcast stations, public address systems, etc. Comes with 8 feet of 2-wire shielded cable. Size 2½ in. high, 1½ in. O. D.

Astatic Model K-2.....\$45.00

ASTATIC CRYSTAL LAPEL MICROPHONE

A high fidelity microphone. Response flat to 6,000 cycles. Size 1½ in. diameter, ½ in. thick. Same acoustic principles as Model K-2. Output —60 db. Weight 1½ oz. Finished in dull black and furnished with 25 feet of shielded cable.

Model L-1.....\$36.00



TURNER CRYSTAL MICROPHONES

Licensed Under Brush Patents

Model G—The ideal microphone P. A. systems and for amateur radio phone stations. Not injured or affected by shocks or movements while in operation. Not affected by variations in temperature. Each microphone is furnished complete with 8 feet of shielded rubber covered cable and ring mounting eyelets. Guaranteed for one year.

Model G—Illustrated on left, \$27.00

Model MU4X—Illustrated on right, \$78.00

Multi-cell and diaphragm construction. Excellent frequency response over entire audibility range. Suitable for broadcast, studio work and the perfect microphone for high

Model G

quality P. A. installations. —72 db. gain. Supplied in either single or push-pull types. The push-pull type is recommended for best results.

No. MU4XS—Single type\$78.00

No. MU4XP—Push-pull type..... 78.00

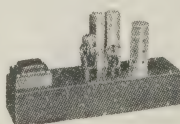


Model MU4X

TURNER PRE-AMPLIFIER

A complete A.C. operated pre-amplifier designed for use with crystal microphone. Two stages—one 67, one 56 and one 80 rectifier. —60 db. gain. Humless. No input transformer. Output 500 ohms. Size 1½x4½ inches.

No. TPA21—Less tubes.....\$42.00



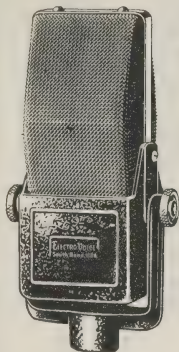
"D-N LIST"

MICROPHONES

ELECTRO-VOICE — QUALITY — ELECTRO-VOICE

RIBBON MICROPHONES

Designed for real high fidelity work. Wide flat response—upper frequency cut-off: 14,000 C.P.S. Voice is articulate and clean. Music is rich and brilliant. Reverberation and feed-back are greatly reduced. Can be used twice as far from the Sound Source—Angle of pick-up being over 60°. A single microphone will pick up an entire group yet eliminate unwanted noises by proper placement. Powerful magnetic circuit gives high output. The ribbon assembly is rubber mounted and shockproof—no external "shock-absorber" needed. Housing of heavy screen eliminates cavity resonance. Transformer housed in aluminum prevents hum pick-up. Finished in durable chrome and black.



Model V-1—Designed for Public Address and Communication. Highly satisfactory for music and speech. Not equipped with cradle. Output: —85 DB. List price.....**\$30.00**

Model V-1X—Same specifications as V-1 but output is —68 DB. List price.....**\$36.00**

Model V-2—Designed for Public Address and Communication. Heavier duty than the V-1. Equipped with cradle. Output: —68 DB. List price.....**\$42.00**

Model V-3—A high output, high quality microphone for ultra-faithful Public Address, Recording and Communication. Equipped with cradle, swivel and shielded plug. Output: —62 DB. List price.....**\$60.00**

Model V-4—The finest microphone that research and development can evolve. Built for the most exacting requirements of Broadcast and Recording. Accurately calibrated. Equipped with cradle, swivel and shielded plug. Output: —62 DB. List price.....**\$90.00**

Above models are all 200 ohms standard output impedance. If high impedance direct to grid type is desired, specify "Hi-Z" type. The "Hi-Z" feature can be had on any of the above models at no extra cost. Built-in windbreak on all models. All Electro-Voice Ribbon Mikes have 5/8-inch 27-thread standard coupling and come complete with 6 feet shielded cable. Complete instructions and circuits packed with each microphone.

NO. 100—"OLD FAVORITE"

A medium small high quality two button mike. High sensitivity results from correct damping. Extremely low hiss level, acid-treated granules reduce ash content, increase their life and allow higher current. Chrome finish.

\$12.00

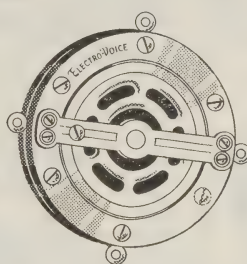


The models listed here are designed to meet any application and are available from our stock: Model 100D—Standard—medium sensitive. Model 100B—Medium damped. Model 100C—Heavily damped.

NO. 88—TWO BUTTON

You get "condenser mike" reports when you use a No. 88. This is an extra high quality mike that can be used under the most exacting conditions, has all features, and more, that are incorporated in much higher priced mikes. Response 30 to 7,000 cycles.

\$30.00



MODEL 77—TWO BUTTON

200 ohms per button. Here is a mike that is really pleasing everyone that buys it. If you want a mike that has REAL QUALITY plus durability, you can bank on the Model 77. Frequency response 40 to 6,500 cycles. Removable buttons—air damped.

\$21.60



RIBBON — AMPERITE — MICROPHONES

AMPERITE VELOCITY MICROPHONES



The best in microphones—and a microphone for every purpose. Eliminates acoustic feed-back—no peaks to tire the listener—natural non-mechanical reproduction—no background noise. Thoroughly shielded—not affected by temperature, altitude or moisture. Will stand mechanical abuse. Instructions and amplifier circuits packed with each microphone.

Model RB-H (high level)—high impedance 2,000 ohm microphone. High enough in impedance to operate directly into grid—but not high enough (but only 2,000 ohms) to introduce serious noises in lines up to 100 feet. Eliminates input transformer and, therefore, inductive hum. Requires 12 DB. less amplification than 200-ohm type. No separate pre-amplifier required with amplifier having a gain of 100 DB. or more. Microphone cable up to 100 feet can be used. For longer lines use R. F. cable or 200-ohm velocity. Excellent for speech or music. Frequency response 40-10,000 cycles plus or minus 1 DB. List price with shock absorber.....**\$50.40**

Model RB-HB (high impedance) beam type—for unusual feed-back conditions. Not a dampened or close talking microphone—sensitivity only 4 DB. below RB-H. Frequency response 40-10,000 cycles plus or minus 1 DB. List price with shock absorber...**\$50.40**

Model RS-H (high level)—2,000-ohm impedance. Similar to the above Model RB-H except that it is especially designed for speech. List price with shock absorber.....**\$38.40**

Model RB-M. 200 ohms. Excellent for speech and music. Microphone cable can be any length up to 2,000 feet. Output (open line) —64 DB. Frequency response 40-10,000 cycles plus or minus 2 DB. List price with shock absorber.....**\$50.40**

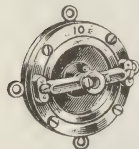
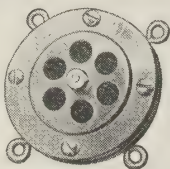
Model RB-S. 200 ohms. Especially designed for speech, can also be used for music. Output (open line) —68 DB. Frequency response 40-8,000 cycles plus or minus 2 DB. List price with shock absorber.....**\$38.40**

Model RB-B. 200 ohms. For unusual feed-back conditions. Frequency response and sensitivity practically the same as the RB-M. List price with shock absorber.....**\$50.40**

Microphones and Microphone Accessories

COMET MODEL—OUR SALES LEADER

Selected by us to give you the greatest value of all time. Not to be compared with any other mike at this price as it is a well made instrument. Pure gold contacts. Chrome plate finish, protected diaphragm and other expensive features. Low hiss level—double button. 200 ohms per button. Response 50-4,500 cycles. Each.....\$5.90

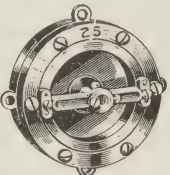


MODEL 10—TWO-BUTTON

200 ohms per button—low hiss level and real good frequency range. An exceptional value at...\$8.90

MODEL 25—TWO-BUTTON

200 ohms per button—a large size professional model—will make good on any sound job. Low hiss level and an extra good frequency range really worth twice the price of.....\$17.90



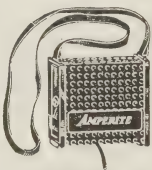
ELECTRO-VOICE HAND MICROPHONES

A Phenolic diaphragm gives performance impossible with any other type. Blasting is eliminated. Extremely durable. Response 50-5,000 cycles. 200 ohms per button. Supplied with 5-foot cable.

201-S—Single button...\$12.00
201-D—Double button... 18.00

AMPERITE JUNIOR VELOCITY MICROPHONE

Weight, 8 oz.
Size, 1 3/4 x 1 1/2 x 1 inches



Sensitivity equal to larger ribbon mikes. Frequency range 60 to 7,500 cycles. Transformer included. Output —68 db. Model 7J—200 ohms.....\$36.00
Model 7JH—High Impedance..... 36.00

AMPERITE RIBBON MIKE CARRYING BAG

Weatherproof—Durable

No. BAG2.....\$0.90

Plan On Attending The Big Servicemen's Convention To Be Held In Minneapolis During April, 1936.

A VALUABLE GIFT GIVEN FREE TO ALL WHO VISIT OUR SHOW-ROOMS DURING THIS CONVENTION.

FULL DETAILS ON CONVENTION WILL BE MAILED SOON.

BEST VALUE! FRICTION LOCK MIKE STAND!

Smooth, silent, positive adjustment.

Adjustable from 41 to 70 inches. Brass, heavy chromium plating, heavy base. Total weight 14 pounds.

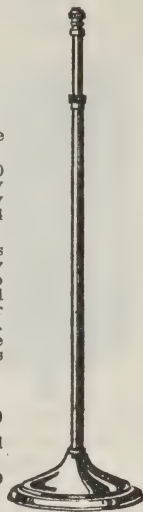
We guarantee that this microphone stand is fully equal in all respects to any microphone stand listed at nearly twice our price, in other catalogs. This stand represents one of the outstanding values in our catalog.

Without Ring

No. G2P.....\$11.90

With 6 1/2-Inch Ring and Springs

No. G2PR.....\$14.10

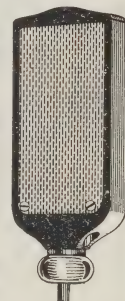


BRUSH CRYSTAL MICROPHONES

Considered by experts to give the finest reproduction of any microphones made. Finest studio quality.

New Brush Sound Cell Microphone for P. A., amateur and remote broadcast pick-up use. Frequency response 50 to 11,000 C. P. S. Output —71 db. Size 4 1/4 x 1 1/2 x 3/8 inches. Weight 3 oz. Furnished with 15-foot shielded cable. High impedance—direct to grid type.

No. B2S.....\$54.00

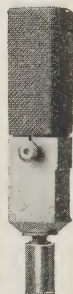


BRUSH STUDIO QUALITY CRYSTAL MICROPHONES

G-4S6P—With socket...\$270.00

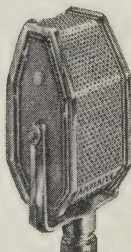
G-2S2P—Non-directional P. A. Mike; with socket...\$130.00

L-2S2P—Lapel Mike... 110.00



AMPERITE STUDIO RIBBON MIKE

A real professional velocity microphone used in many broadcast station studios.



Frequency response 25 to 14,000 C. P. S. Output —65 db. Pick-up range on front side, 120 degrees; on back side, 120 degrees. Made for standard 1/2-inch pipe thread.

Model SR80—50 or 200 ohms....\$120.00

"D-N LIST"

ELECTROVOICE MICROPHONE REPAIR PARTS

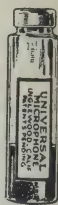
Carbon Granules

Carefully Selected Stock of Best Quality

No. 307—No. 60 grains—repack two mikes—for hard usage mikes\$0.70

No. 308—No. 80 grains—for general purpose—P. A. mikes, etc.\$0.70

No. 309—No. 100 grains—high sensitivity—mikes must be handled with care.....\$0.70



DURAL. DIAPHRAGMS

For Condenser Mikes

Electrovoice 4x4 inches duraluminum sheets for making condenser mike diaphragms—.001 thick.

No. EV44.....\$0.60

AMPERITE REPLACEMENT DIAPHRAGMS

For Ribbon and Condenser Microphones

REPLACEMENT RIBBONS

No. ARRI—Standard, package of 2 \$1.50
No. ARRI-X—Supersensitive, package of 2\$2.10

CONDENSER DIAPHRAGMS

No. ACD-1—Standard, mounted...\$1.20
No. ACD-1X—Supersensitive, mounted\$2.40

FLEXIBLE COUPLING

For mounting ribbon microphones to stand. Eliminates mechanical vibrations. No. AFC-1.....\$2.40

WRIGHT DE COSTER "PORT-A-CASE"

Public Address Reproducers



Very strongly built of the most suitable woods and well covered with a heavy duty, long wearing leatherette. Excellent baffle effect. The removable front plate and sliding back protect speaker against damage by weather or rough handling. There is room at the bottom of case to house any of the popular type amplifiers as well as the 470 or 520 field supply.

Model 1440—Port-A-Case with 10-inch Reproducer. Weight, 17 lbs.....\$14.40

Model 790—10-inch Chassis. Voice coil impedance 5.05 ohms at 400 cycles. Field coil dissipation maximum 12 watts, minimum 6 watts. Power handling capacity 9 watts.*

Model 2400—Port-A-Case with 12-inch Reproducer. Weight, 25 lbs.....\$24.00

Model 1750—12-inch Chassis. Voice coil impedance 2.6 ohms at 400 cycles. Field coil dissipation maximum 16 watts, minimum 9 watts. Power handling capacity 10 watts.*

Model 2630—Port-A-Case with 12-inch Reproducer. Weight, 26 lbs.....\$26.30

Model 1980—12-inch Chassis. Voice coil impedance 10 ohms at 400 cycles. Field coil dissipation maximum 18 watts, minimum 12 watts. Power handling capacity 11 watts.*

Model 3590—Port-A-Case with 12-inch Reproducer. Weight, 31 lbs.....\$35.90

Model 2940—12-inch Chassis. Voice coil impedance 10 ohms at 400 cycles. Field coil dissipation maximum 22 watts, minimum 15 watts. Power handling capacity 12 watts.*

*Voice Coil Transformer 500-1,000 ohms impedance.

Model 1090—Port-A-Case only, for 10 or 12-inch Speakers. Weight 12 lbs...\$10.90

Outside dimensions, 16 inches high, 14 inches wide, 10 1/4 inches deep, inside dimensions, 14 1/4 inches high, 13 1/2 inches wide, 9 inches deep.

Microphone Stands and Accessories

Universal SUSPENSION SPRINGS

Highest grade spring steel. Rust proofed and polished chrome plated. No. MS8—8 for.....\$0.60



SUSPENSION RINGS

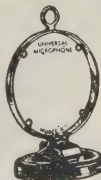


Solid metal for hanging mikes from ceiling, etc. Chrome plated, 8 springs included. 5-inch diameter for Models X and smaller diameter mikes. No. USR5.....\$3.00 6 1/4-inch diameter for Models LL, BB and larger diameter mikes. No. USR6.....\$4.80

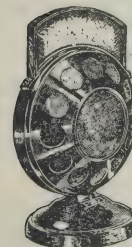
NEW X—DESK MOUNT

Highly polished nickel plate, rubber base cover and 8 suspension springs especially for Universal X Unit or any medium or small diameter microphone. Not a cast-iron pipe fixture assembly with a spray finish.

No. UX420.....\$4.20



"K" DESK MOUNT



Model "K" 5 in. diameter for Models "X", "A", "4" point suspension, 8 springs. Base set in moulded rubber. Finished in highly polished chrome plate, blank call letter name plate as shown. Cable passes through hollow base. Wt., 2 1/2 lbs. 8 1/2 ins. high. With covers as shown. No. UK720.....\$7.20 Without covers. No. UKN480.....\$4.80

COMBINATION "L" DESK MOUNTS

Two lengths of tubing, one to make up low mount and a 6-in. piece to make a high mount. Chrome plated. Two stands in one. Ring 6 1/2 in. diam. With covers as shown, with 8 springs. No. UL12.....\$12.00

Without covers. No. ULN720.....\$7.20



COMBINATION BANQUET AND FLOOR STAND

Adjustable from 24 inches to 62 inches—3 pieces. Friction lock. Can be used on tables, desks, pulpits, or as full floor stand. Chrome plated. Weight, 14 lbs. A wonderful value. No. G3P.....\$12.50 No. G3PR—With 6 1/2-inch ring and springs.....14.90

MICROPHONE SADDLE



A dandy support for crystal mikes—tilts to any angle and locks in place. Aluminum. Chrome plated. No. B502.....\$2.90

Bud JUNIOR MIKE RING



5 1/2-in.—octagon shape—black crackle finish—complete with springs. No. B820.....\$1.80 Senior Mike Ring—6 ins.—round—chrome plated—with springs. No. B800.....\$2.50

No. B817—Modernistic desk stand. 5 1/2-in. ring. Octagon. Black crackle finish. Ht. 9 ins.—with springs.....\$2.30 No. B818—6-in. ring. Height 10 ins. Black crackle finish—with springs.....\$2.70



No. B819—Like B818—height 13 ins.—heavier base with springs...\$3.50 No. B803—Adjustable desk stand—12 ins. to 18 ins.—6-in. ring—heavy base—base and ring black crackle—tubing is chrome—with springs.....\$5.90

COLLAPSI- BLE FLOOR STAND

Light, compact, adjustable, that can easily be carried around. Triple tube assembly—chrome plated. Extension 36 ins. to 78 ins. Comes with 6-in. ring—springs included. No. B821.....\$14.60



THE AMATEUR'S FAVORITE

As illustrated—for use with all crystal mikes—1/2-in. thread. Has swivel top—felt feet. Height 9 ins.—chrome plated. We guarantee you will like this. No. EC-5D.....\$6.50



STUDIO FLOOR STAND

Base diameter 12 ins. Height 5 1/2 ft. Weight 12 1/2 lbs. Base—frosted silver—rest is chrome plated. Equipped with call letter name plate and cadmium plated copy holder size 7 1/2 x 10 ins. No. USF18.....\$18.00



DUPLEX FIXTURE

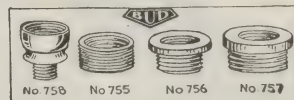


No. 2CFS—2-piece adjustable floor stand, 6 1/2 ft.—7-in. base—6 1/2-in. ring—chrome.....\$10.90



This fixture is furnished with two-lock type swivel joints less rings—can be easily attached to any mike stand. Chrome plated—17 inches. No. B839.....\$7.00

MICROPHONE STAND ADAPTERS



These adapters will fit any stand having a 1/4-in. thread so that any type of microphone can be used. No. B755—1/4 Pipe to 1/4—27. List \$0.30 No. B756—1/4 Pipe to 1/4 Pipe. List. .30 No. B757—1/4 Pipe to 1/4 Pipe. List. .30 No. B758—1/4 Pipe to 1/4 Pipe. List. .30
Microphone Type Adapter No.
Brush Dev. Co. Crystal 758
Shure Bros. 70 H Crystal 755
Amperite Corp. Public Address 755
Amperite Corp. Studio 756
Astatic Crystal 753
Bruno Velocity none
RCA Velocity 756

SWIVEL JOINT



Allows universal tilting of crystal type microphones. Has 1/2-in. iron pipe male thread at one end and 1/4-in. female thread on other end and is fitted with additional bushing so as to accommodate 1/4-in. Nickel plated. No. B838.....\$2.70

MICROPHONE PLUGS AND JACKS



3-Prong Mike Plugs. Telephone Type. Standard Size. No. B1057—Molded bakelite handle—tinned solid brass contacts.....\$0.90 No. B234—Same as B1057 with heavy metal handle instead of bakelite for shielding.....\$1.26 3-Contact Mike Jack. Telephone Type. Fits 7/16-Inch Hole. No. B1058—For panel mounting...\$0.60 3-Contact Mike Connector No. B1059—Fits B1057 plug—bakelite.....\$0.80 No. B283—Same as B1059 except has heavy metal handle.....\$1.14

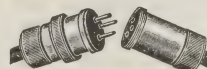
SHIELDED MIKE PLUG AND CABLE CONNECTOR

Polarized—heavy bakelite housed in heavy metal shield. Supplied with hold-tight cord grip and locking device. 17/16 ins. diameter. No. B386—Plug.....\$0.90 No. B387—Connector...1.20



AMPHENOL MICRO- PHONE CON- NECTOR

Heavy brass outer shell—finished in chrome and black. Locks together. Weatherproof. 2 1/2 ins. long overall—13/16 inches diameter over-all. Type MC3—Each (pair).....\$2.40



MIKE RECEPTACLE

Single gang plate. Mounts flush on wall. Bakelite. Size 2 3/4 x 4 1/4 ins. Brown. No. B627—Complete...\$2.70 No. B5073—Receptacle only.....2.40



Cable Connectors will be found on page 37.
Mike Wires and Speaker Cables on pages 40-41.

Pick-ups, Cutting Heads, Records



AUDAK NO. 100
Compact size. Weighs less than one-fifth of the average pick-up. Play up to 10-inch records. Good quality.

\$8.90

Specify high or low impedance.

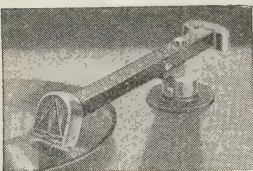
AUDAK NO. 433



Music Master

Very good quality. Play up to 10-inch records. Has rear balance. Suitable for playing 33 1/3 and 78 R.P.M. records.... **\$11.20**

Specify high or low impedance.



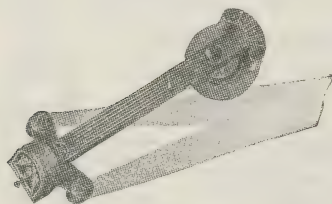
AUDAK No. 2033 Music King

Extra good response—plays up to 12-inch records. Both fast and slow speeds

\$14.50

Specify high or low impedance.

AUDAK NO. HR33



Has special needle ballast for obtaining maximum efficiency from slow-speed records. Plays up to 12-inch records—fast or slow. A very high quality instrument **\$19.70**

For broadcast studios—Audaak Professional Model. Plays all types transcriptions. Extremely good frequency range. Each **\$53.60**

UNIVERSAL STROBO-SCOPE

Shows when used under an AC light, the correct speed for any phonograph turntable. Calibrated for 33 1/3 and 78 R.P.M. Diameter 6 inches..... **\$0.30**



AUDIO-TONE TEST RECORD

Double-faced test records—giving you all audio frequencies from 50 to 7,000 cycles. Very useful in testing pick-ups, mikes, etc..... **\$3.60**

ASTATIC CRYSTAL PICK-UP

Model S

Very good response from 30 to 10,000 cycles. High impedance (100,000 ohms). Only 2 3/4-oz. pressure on needle point. Non-resonant. This is an extremely high quality pick-up. Two lengths.

Model S-8—8-in. arm..... **\$18.00**

Model S-12—12-in. arm..... **21.00**

AN EXTREMELY HIGH QUALITY LINE OF PICK-UPS AT LOW PRICES

Specify whether you want low or high impedance

No. V-8-S—8 3/4-inch arm overall. Volume control type less weight. Complete with springs for both 33 1/3 and 78 R.P.M. recordings **\$9.00**

No. V-W-11—11 1/4-inch arm overall. Volume control type with weight for 33 1/3 and 78 R.P.M. recordings.. **\$10.80**

No. V-11-S—11 1/4-inch arm overall. With volume control. 78 and 33 1/3 R.P.M. **\$9.00**

No. 11-S—11 1/4-inch arm overall. No volume control. 78 and 33 1/3 R.P.M.. **\$8.00**

Pick-up heads only..... **5.00**

No. R. W.—Recording Weight..... **1.40**

No. P-W-15—Theatre pick-up arm—15 1/2 inches overall. For both 33 1/3 and 78 R.P.M., no volume control..... **\$11.60**

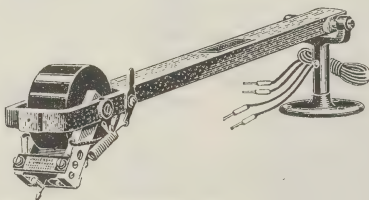
UNIVERSAL FULL FREQUENCY PICK-UP



A high class pick-up for play-back of all types of instantaneous records—especially aluminum, silveroid, etc. Particularly good for transcription work. Should not be used as recorder. Matches input of standard mike transformers—400 ohms. Other inputs on special order. Plays both 78 and 33 1/3 R.P.M.

No. UFP..... **\$18.00**

UNIVERSAL POWER RECORDER



For cutting any type of material and recording of all audible frequencies. 6-volt field. Really high quality recordings are assured. Standard impedance, 400 ohms. Other inputs on special order.

No. UPRH—Head only..... **\$42.00**

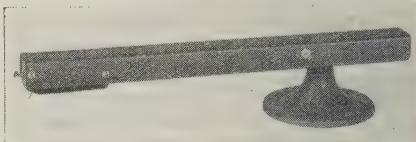
No. UPRH—Complete with arm... **54.00**

Our Modern, Fully Equipped P. A.

Department offers you

Complete Co-operation.

"D-N LIST"



PATENTED PROCESS ALUMINUM DISCS



Special alloy. Ready for use. Universal aluminum discs are of special alloy, hardness, and surface mirror polished to assure volume, brilliancy and durability with a minimum of surface noise. We recommend the use of cactus on these records.

EXTRA HEAVY ALUMINUM DISCS, EITHER BLANK OR PREGROOVED

(State which type desired when ordering)

No. UAR6—Extra heavy, 6 in..... **\$0.36**

No. UAR8—Extra heavy, 8 in..... **.60**

No. UAR10—Extra heavy, 10 in..... **.90**

No. UAR12—Extra heavy, 12 in..... **1.20**

STANDARD WEIGHT DISCS (Blanks Only)

No. UA56—6 in..... **\$0.30**

No. UA58—8 in..... **.42**

No. UA510—10 in..... **.60**

No. UA512—12 in..... **.70**

SILVEROID RECORDS

The Silent Background Records

Equal to high grade commercial pressed records. Can be processed and any number of copies made. Use "D" cutting sapphires. For play-back use bamboo or cactus needles. Groove becomes smoother with use. Supplied ungrooved only.

No. USR10—10 in..... **\$1.80**

No. USR12—12 in..... **2.40**

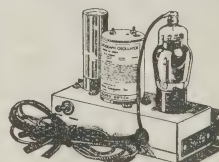
ALUMINUM DISC RECORDER MODEL 12



For up to 12-inch records. Has powerful motor. Weighted turntable, two speeds, 33 1/3 and 78 R.P.M., rubber mounted. Fitted with volume indicator, volume control, "off" and "on" switch, cuts eighty lines per inch. Fitted with Universal power head with 6-volt field. Complete instructions furnished. **\$108**

No. U12..... **\$108**

Send for Universal Catalog if interested in recording.

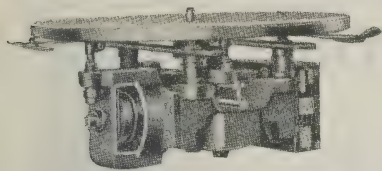


RCA PHONO-GRAPH OSCILLATOR

A simple device for broadcasting records into your radio receiver. Excellent tone quality, easily and quickly installed and works perfectly with all pickups. Uses either 2A7 or 6A7 tube. Includes radio-record switch and special connectors for obtaining power.

No. 9554—List price (less tube). **\$9.30**

Phono. Motors - Pick-ups - Needles



GREEN FLYER PHONO. MOTORS

Dual speed, 33 $\frac{1}{3}$ and 78 R.P.M. Governor controlled. Uniform speed. Smooth running induction motor. No brushes or commutator to create radio interference. Silent in operation. Ruggedly built. Heavy cast frame. Oversize self-lubricating bearings. Machined gears sealed in oil. Rubber floating suspension. Will not overheat in enclosed cabinet. For "long playing" or standard records. Mounts in 8 $\frac{1}{2}$ x5 $\frac{1}{2}$ in. cut-out. Motor dimensions overall, 8 $\frac{1}{2}$ x5 $\frac{1}{2}$ ins. Suspends 3 $\frac{1}{2}$ inches below base board. For 105-120 volt, 60-cycle AC. Shipping weight, 16 pounds.

Model D-10—10-in. turntable.....\$19.20
Model D-12—Complete with weighted 12-in. turntable which is essential for satisfactory reproduction of 33 $\frac{1}{3}$ R.P.M. records. Shipping weight, 17 pounds.....\$19.80

Single Speed 78 R.P.M.

Model A-10—Same construction as above. Furnished with 10-inch turntable. Automatic stop not included. Motor dimensions, 6 $\frac{1}{2}$ x3 $\frac{1}{2}$ inches; suspends 3 inches below base board. For 105-120 volt, 60-cycle AC. Shipping weight, 13 pounds....\$15.00

Single Speed 33 $\frac{1}{3}$ R.P.M.

Model B-12—Same construction and sizes as above. 12-in. turntable.....\$15.60

6-Volt DC. Type

Model 2664—Single speed, 78 R.P.M. 10-inch turntable. Operates from 6-volt storage battery at 2.8 amps. Shipping weight, 13 pounds.....\$25.20

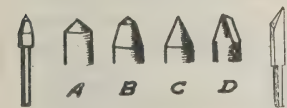
Model 2671—33 $\frac{1}{3}$ and 78 R.P.M. 12-inch turntable. Otherwise same as Model 2264.....\$28.80

PACKARD AUTOMATIC RECORD CHANGER



Plays eight 10-inch records automatically on one side; 12-inch records manually. Two-speed motor, 33 $\frac{1}{3}$ and 78 R.P.M. Lever shifts speed quickly. Last record is repeated until turned off. Any record may be repeated or rejected. Governor controlled induction motor. Webster or astatic crystal pick-up. Built-in volume control. Requires space 18 inches long, 5 $\frac{1}{2}$ inches high and 13 $\frac{1}{2}$ inches wide. Weight, 26 pounds. 110 volt, 60-cycle. Model K—Less case.....\$56.70

Model L—Same as Model K but plays eight 10-inch or seven 12-inch records automatically. Requires space 22 $\frac{1}{2}$ inches long, 5 $\frac{1}{2}$ inches high and 16 $\frac{1}{4}$ inches wide. Model L.....\$66.00



UNIVERSAL RECORDING AND PLAYBACK QUALITY PHONO. NEEDLES

No. UA—For simultaneous grooving and recording on blank aluminum discs, should be used at 25° to 28° angle from vertical. Genuine sapphire.....\$4.80

No. UB—For both recording and playback on pregrooved discs such as black composition home recording discs, and pregrooved aluminum. Bent shank provides proper angle when used in 25° cutting head. Sapphire.....\$4.80

No. UD—Special cutting needle for silveroid and semi-plastic materials in which a fine thread is actually cut out of the material. Should be used at a 2° angle from vertical. Point of hardest sapphire, insuring long life.....\$7.20

No. UE—Bamboo (fibre) playback needle for playing aluminum and all other records. Eliminates surface noise, gives sweet mellow tone. Should be sharpened each time used. See cutter illustrated for repointing. Envelope of 100.....\$1.20

No. URC10—Red Cactus Needle—the most durable non-metallic needle. Plays 5 to 15 records without repointing. Record groove actually improves each time used. Envelope of 10.....\$1.20
No. UNS—Scissor for sharpening F needles.....1.50

WRITE FOR SPECIAL TECHNICAL UNIVERSAL
BULLETIN IF INTERESTED IN PROFESSIONAL RE-
CORDING.

R.C.A.-VICTOR RECORD PLAYER

An inexpensive instrument built by R.C.A.-Victor. Makes an ideal record player for use in adapting radio sets to fine phonograph performance. May be used in conjunction with the R.C.A. RK24 Phonograph Oscillator, or may be directly connected to the radio receiver. In sets with low audio gain the Oscillator must be used. The ready portability of the R.C.A. Record Player also adapts it for effective use with portable AC. operated sound equipment.

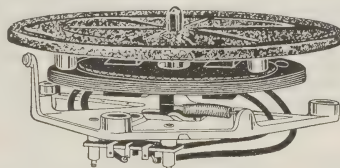


PORTABLE—ELECTRIC OPERATED

The R.C.A. Record Player consists of an electrically driven, constant speed turntable capable of playing either ten or twelve-inch records, and a modern electrical pick-up. Motor operates on 110 volt, 60-cycle current. A volume control extends out of one end of the case.

CAN BE USED WITH ANY RADIO RECEIVER

Sell extra entertainment profitably by means of the R.C.A.-Victor Phonograph Record Player. Easily connected to any radio receiver. Housed in an attractive walnut finish chest, only 10 $\frac{1}{2}$ x8x5 inches.....\$19.80



R.C.A.-VICTOR ELECTRIC PHONOMOTOR & TURNTABLE NO. 9038 110 V.-60 CYCLE

A valuable unit in compact size. Hand starting. Synchronous motor. 7 ins. diameter, 2 $\frac{1}{2}$ ins. deep. Plays 10 or 12-in. records at standard speeds.

No. 9038.....\$9.60

R.C.A.-VICTOR PICK-UP AND ARM

For use with R.C.A. turntable No. 9038 or any other small size turntable. Arm length 7 ins. This pick-up gives very good quality reproduction. Coil impedance, 2,500 ohms. 78 R.P.M. only.

No. 6592.....\$6.00



R.C.A.-VICTOR 2-SPEED PICK-UP



A counter-balanced magnetic pick-up. Used in 1934 R.C.A.-Victor Model 331 Radio Phono. Combination. Has frequency response flat from 50 to 5,000 cycles at impedance of 28 ohms. The arm is counter-weighted for both the 33 $\frac{1}{3}$ and 78 R.P.M. records, and is mounted on a special rubber cushion. The complete assembly consists of Pick-up Head No. 6542, Pick-up Arm No. 6543 and Escutcheon No. 3779.

No. R123P—Complete Assembly as listed above.....\$10.20
No. 6542—Head only.....5.00

R.C.A.-VICTOR PHONO. NEEDLES

STEEL—3 sizes: Half Tone, Full Tone and Extra Loud Tone. 100 needles to envelope (except 75 in Half Tone). Per envelope.....\$0.12

CHROMIUM—A new Victor development to fill the need of a sturdy, semi-permanent needle. Two types: One type (with green shank) for use with 78 R.P.M. records; the other type (with orange shank) for use with 33 $\frac{1}{3}$ R.P.M. records. 6 needles in container.....\$0.30

TUNGSTONE—Semi-permanent needles. Two types: Full Tone and Extra Loud Tone. 8 needles in container.....\$0.30

HOME RECORDING—For recording and reproducing R.C.A. home recording blanks. 8 needles in container.....\$0.30

SHADOWGRAPH—A steel needle for use in theatres and broadcast stations. 100 for.....\$1.00

Special Victor Records

Home Recording Blanks—Made especially for recording selections on Home Recording units. List prices: Six-inch Blanks (kit of 4), \$1.20. Ten-inch Blanks (kit of 2), \$1.20. Twelve-inch Blanks (kit of 1).....\$1.20

Wireless Telegraph—A set of six records comprising a comprehensive course in continental Morse telegraphy. List price, complete with handbook, \$6.00 per set.



The Very Latest in
Public Address
Equipment

United Sound

THE "TOPS" IN P. A. PERFORMANCE

1936 BEST VALUES

Read the specifications on this powerful new 1936 advanced type 18 watt Class AB amplifier together with the information on the two new amazing Complete Portable Amplifier Systems. High gain—you can use ribbon or crystal mikes. We positively guarantee satisfaction. We know this amplifier will out-perform any other amplifier selling at twice the low price offered on the LR 18.

18 WATTS CLASS AB—FIXED BIAS—AMPLIFIER

This advanced type of high gain amplifier has four stages using two rectifier tubes. Tube line-up is as follows: 57-56-2—No. 45—26-5Z3. The 26 tube supplies fixed bias. This amplifier has sufficient gain to operate ribbon or crystal microphones without extra re-amplification.

Output—18 watts.

Harmonic Content, 5%.

A. F. Range—20 to 10,000 cycles + or -2db.

Gain—132.8 db.

Hum Level—60 db. down.

Inputs—No. 1—One megohm for either high impedance ribbon or for crystal mike.

No. 2—For high impedance phono. arm.

To use a low impedance ribbon or dynamic microphone with the LR-18 an external input transformer, the T-12, must be used.

LR-18—AMPLIFIER (less tubes). List Price\$76.50

T-12 Transformer. List Price.....\$9.60

COMPLETE 18 WATT P. A. SYSTEM

The Portable Ribbon Microphone supplied standard with the UL-18 gives this complete P. A. System some outstanding advantages. It is suspended inconspicuously by a cord around the speaker's neck. Once suspended he can forget that he is talking over a P. A. System, turn his head from side to side, and walk about the platform. This mike can also be used in the usual stationary method.

UL-18 Complete P. A. System. List price.....\$150.00

This high powered, complete A.C. operated P. A. system comes with 12-inch dynamic speaker, 50-foot speaker cord, 10-foot mike cord, mike and USE type LR-18 amplifier (specifications below), mounted in handsome leatherette carrying case. Built-in fader provides for using the Portable Ribbon Microphone and a pickup simultaneously. Tone control is also included.

UL-18 Complete P. A. System. List price.....\$150.00

Extra Portable Speaker for UL-18—includes Field Supply. List Price..... 66.00

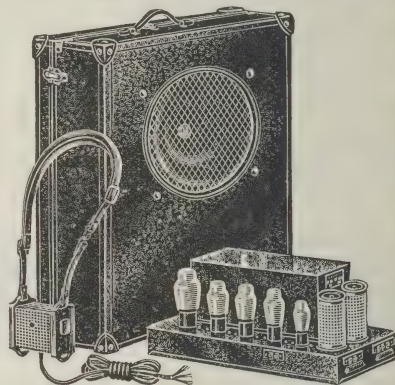
(Supplied in companion half carrying case.)

Dimensions: 25x20x9 inches. Weight: 55 lbs. Due to the fact that stationary ribbon microphones are preferable for some applications such as orchestra use the UL-18 can be supplied less microphone. A Crystal or Dynamic microphone may also be substituted. Prices on other models of ribbon, crystal, and dynamic mikes can be found on pages 44-45.

ULN-18 (UL-18 less mike only). List price.....\$120.00

ULX-18—A complete P. A. System composed of the LR-18 Amplifier with tubes, 2 leatherette covered carrying cases containing 2 Wright DeCoster Model 1750 Paracurve Dynamic Speakers, 2 Field Supply Units and 2-50-foot R/C Speaker Cables—less microphone and stand. (We suggest the use of a high impedance ribbon mike and a No. G2P stand.) List price.....\$189.70

UL-18-HD—This is a complete heavy duty P. A. System in which special emphasis is laid on very high speaker efficiency which is obtained through the use of an unusually heavy duty field supply—51 watts dissipation in the two speaker fields. This system is composed of one LR-18 18 watt amplifier, tubes, two Wright DeCoster No. 2940 weatherproof paracurve dy-



namics, one Wright DeCoster No. 3930 AC field supply, two UL-18 carrying cases, one friction lock No. G2P mike stand, two 50-foot R/C speaker cables, plugs, cords, etc.

No. UL-18-HD—Complete as listed.....\$249.90

No. UL-18-HDR—As listed above together with a high impedance ribbon microphone\$299.90

No. UL-18-HDC—As listed under UL-18-HD together with an Astatic crystal microphone D-104.....\$279.90

16 WATT CLASS AB AMPLIFIER LC-16 AMPLIFIER

Uses one 57, three 2A5 and one 83 tubes in Class AB circuit. A low impedance input is supplied for one 2-button carbon mike, and a high impedance input for phono. pickup arm.

Built-in fader allows mixing of voice and record music. Tone control is also incorporated. Frequency response plus or minus 2db from 100 to 10,000 cycles.

Power Output—16 watts.

Output Impedance—500, 250, 125, 15, 7,

5, and 2 ohms.

Gain—36.4 db.

Mike Current—For one 2-button carbon

mike.

LC-16 (less tubes). List Price.....\$58.80

Field Current—20 watts supplied to 7,500 ohm load.

Dimensions—Overall 16x7x8 inches.

Weight—23 lbs.

UL-16 PORTABLE

12-inch Dynamic Speaker—2-Button Carbon Mike. Built-in Mike-Phono Fader and Tone Control.

The UL-16, complete AC operated P. A. System is ideal for use wherever a compact, portable high-powered unit is required at the least possible expense. It is especially recommended for sales demonstrations, corn games, carnivals, exhibitions, etc. This P. A. System has plenty of power to amplify your voice for crowds of several thousand people.

The UL-16 comes complete in every respect as illustrated, including tubes, 50-foot speaker cord, and 10-foot mike cord. Provision is made for connecting additional speaker and phonograph. The built-in mixing arrangement permits you to talk into the mike with a background of phonograph music.

UL-16 Complete P. A. System. List price.....\$105.00

Extra portable speaker in similar case. List price..... 66.00

(Supplied in companion half carrying case when specified.)

Dimensions, 25x20x25 inches. Weight, 55 lbs.

36 WATT CLASS AB AMPLIFIER

METAL TUBES USED

This new advanced 1936 amplifier uses 2-6J7, 2-6F5, 6-6F6, 1-80 and 1-83. Has very high gain of 140DB. A.F. range 20 to 10,000 cycles + or - 2DB. Has three high impedance input circuits each with independent Fader. Two output connections each with 18 watts—volume controlled separately on each output. Output impedances—2, 4, 8, 15, 125 and 500 ohms. Supplies 20 watts current to each of two 8,000 ohm fields. Tone control.

LR36—Less tubes\$112.80

PORTABLE PHONO. ASSEMBLY

An extremely handy unit—a necessary component of a complete P. A. System. Incorporates a two-speed Green Flyer elect. phono. motor and turntable, a Hydro pickup of best quality (can be furnished either high or low impedance), AC cords and plug. Switches and other accessories all mounted in a sturdy leatherette covered plywood carrying case. Size 16x19x8.

No. PPA—Complete.....\$48.00



Engineering Co.

The Very Latest in
Public Address
Equipment

26 WATTS—CLASS B

A Class B amplifier with distortion down to an absolute minimum thru an improved circuit using No. 59 tubes in the driver and output stages. The 26-B is designed to handle large sound installations of any type. For large outdoor installation, such as stadiums and grandstands, the type 305 speaker is recommended inasmuch as it is designed to handle great power. In smaller public address installations, the type 325 can be used, but not less than four 325's should be used on the output of the 26-B to assure that the high output does not break down the speakers.

SPECIFICATIONS

Number of Stages—4; tubes used: 1 No. 57, 1 No. 56, 3 No. 59, and 1 No. 83. Output—26 watts. Gain, 97.6 db. at 60 cycles. Field current, supply 40 watts for 1 to 6, 2500 ohm fields. Input Impedance—500,000 ohms (grid of No. 57, no input transformers). Power Consumption—120 watts plus field wattage used. Output Impedance—5,10,15 and 500 ohms. Microphone current, 10 mills for one 2-button microphone. Frequency Characteristics—Response curve basically flat from 40 to 10,000 cycles. Controls—Power Switch, master volume control, tone compensator. Additional power can be obtained by adding any number of 26-X, driver and output stages, supplied in same type chassis. Over All Dimensions, 17 1/4 x 9 1/4 x 10 1/4. Shipping weight, 40 lbs.

26-B Amplifier. List Price\$144.00
26-X Power Stage. List Price 120.00

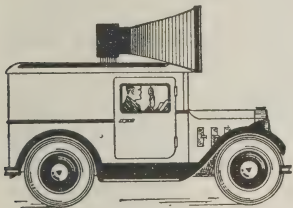
15 WATTS—CLASS A

Uses 2 No. 2A3 tubes in push-pull with fixed bias, accomplished thru using a type 26 tube as an independent rectifier. The 15-A operates strictly Class A up to 15 watts output, above which it slides into Class B up to 20 watts maximum. In this amplifier distortion is at a minimum, allowing the finest tone quality of any amplifier listed in this catalog.

Master gain control, tone compensator, and power switches are mounted on the control panel. All connections are made thru polarized receptacles at the rear and sides of the amplifier. Microphone current and field current are supplied with no compensation required when not used, and additional power can be obtained by adding any number of 15-X, 15 watt auxiliary power stages.

SPECIFICATIONS

Number of stages, 3. Output, 15 watts. Gain, 96 db. Field current, 40 watts available for up to four 2,500 ohm fields. Microphone current, 10 mills for one 2-button microphone. Tubes used, 1 No. 57; 1 No. 53; 2 No. 2A3; 1 No. 83; 1 No. 26. Power consumption, 95 watts plus field wattage used. Input Impedance, grid of tube. Output Impedance, 5, 10, 15 and 500 ohms. Power Supply, 110 volts, 60 cycles. Over All Dimensions, 17 1/4 x 9 1/4 x 10 1/4. Type 15-A Amplifier, complete with tubes. List Price \$132.00
Type 15-X Auxiliary 15 watt power stage, complete with tubes. List Price.....\$102.00



COMPLETE SOUND CAR SYSTEMS

NO "B" BATTERIES USED.
BUILT-IN GENERATOR.
MOTOR.

THE TYPE 608-E AMPLIFIER

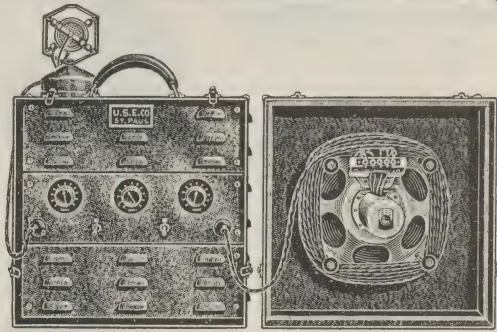
The 608-E Amplifier operates solely from a 6 volt storage battery. The 608-E has 8 watts output which is plenty of power for a good car installation. Any output over 8 watts in a sound car is useless due to feedback except in very elaborate and expensive installations. The plate current is obtained thru a built-in converter. Master gain control, tone control and power switch are mounted on the chassis.

SPECIFICATIONS

Field Current Supply—None. Specify speakers to have 6 volt fields. Tubes Used—76-76-42-42. Battery Drain—11 amperes. Output—8 watts. Number of Stages—3. Input Impedance—Gain control to grid. 250,000 ohms. Output Impedance—500 ohms. Microphone Current—For one 2-button carbon mike. Type 608-E Amplifier. List Price (less tubes).....\$88.00

The Type 308 complete Sound Car System operates from car storage battery and 250 volts of "B" battery. It consists of one Type 308-E Amplifier, one No. 2-AB Fader, one double-button carbon microphone, one suspension ring, and one PA-21 3-ft. horn with 6-volt field dynamic speaker assembly, connecting cords, etc. Nothing else to buy except tubes and "B" batteries. If it is desired to operate the system entirely from the 6-volt car battery eliminating the "B" batteries, specify the Type 608 Complete Sound Car System. List price.....\$132.00

"D-N LIST"



U-29

THE U-29 PORTABLE—8 WATTS

Operates from Your Car Storage Battery—or 110 Volts AC

Designed especially for uses such as political campaigning, where speeches must be made at both outdoor meetings where standard power is not available, and in clubs and halls where it is convenient to use standard power from the light socket. The U-29 operates from either 6 volts DC (your car storage battery), or from standard 110 volts AC, 60 cycles. All you have to do is to plug the power into the proper polarized receptacle and then throw the toggle switch on the panel to the AC or the DC side. No damage can be done even if the switch is thrown to wrong side. For further details on tone quality, controls, etc., refer to the U-19 Portable, as the U-29 has same characteristics as the U-19.

SPECIFICATIONS

Power Consumption—On storage battery, 12.4 amps. On 110 AC, 60 cycles—75 watts. Tubes used—79-76-42-5Z3. Gain—92 Db; Power Output—8 watts. Field Supply—For one or two Duo-field speakers with 10,000 ohms and 6 ohm windings. Mike Current Supply—For one 2-button mike—supplied. Output Impedance—500 ohms. Input Impedance—(1) For 2-button mike—400 ohms. (2) For any high impedance pick-up arm. Speaker—10 in. dynamic. Cords—50 ft. 4 wire speaker cable; 10 ft. 3 wire mike cable. Over All Dimensions—16x16x12 ins. U-29 Portable complete public address system with tubes. List price.....\$210.00

THE 2-AB FADER

Can be used as an input device to the grid of the first tube in any power amplifier. The 2-AB has two positions, one for two standard 2-button microphones, and one for standard high impedance pick-up arm.

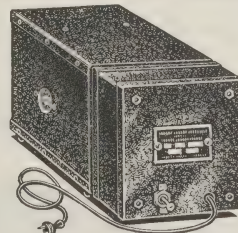
The individual controls permit independent fading of the two circuits. The 2-AB Fader is especially designed as an input device for the 26-B and the 15-A.

2-AB Fader. List Price\$27.00



SINGLE UNIT A. C. PRE-AMPLIFIER

For Ribbon, Dynamic and Crystal Microphones



Its extremely low noise level makes it ideal for use as a remote amplifier or a booster amplifier in broadcast work. The unit is completely shielded magnetically, electrostatically, and acoustically. Amplifier tubes floating on sponge rubber mountings minimize microphonic pickup. The specially designed audio frequency transformers have triple shielding and are magnetically and electrically balanced.

SPECIFICATIONS

Input—50 ohms and 200 ohms for ribbon or dynamic microphone. Input is also available for use with crystal microphone. Output—400 ohms (balanced to ground or one side ground), 100 ohms (one side grounded). Gain—51.1 db. at 1,000 cycles. Frequency response—Flat plus or minus one db. 50 to 12,000 cycles. Noise Level—Equal to minus 120.93 db. on the input (zero equals .006 watts). Tubes Used—6C6, 6C6-84. Controls—Power switch only. Maximum Output Level—Plus 5 db. (zero equals .006 watts). Dimensions—6 1/2 x 7 x 14 inches. Shipping Weight—25 pounds. PA-1 (Complete with tubes). List price.....\$105.00.

PUBLIC ADDRESS EQUIPMENT

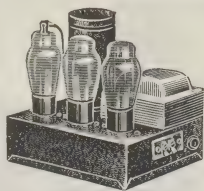
"L" Series Amplifiers!

Quality at Low Prices—Compare—
Then Buy!

3-WATT AMPLIFIER

The L-3 is recommended for electrifying old phonographs, modernizing old type receivers, adding extra loud speakers to receivers, testing loud speakers, and for use in small call systems. General specifications same as L-7 except tubes used 57-2A5-80; no output transformer—will handle one dynamic speaker with 2,500 ohm field with transformer for single 2A5; no controls; overall dimensions 6x7x7.

Price (less tubes) **\$19.90**
With Raytheon tubes **23.00**
The L-3 will be furnished using a 2B6 power tube instead of a 2A5 if requested.



7-WATT AMPLIFIER



The L-7 is a straight Class A amplifier offering exceptionally good tone quality at either high or low output. The L-7 has fine frequency response over entire range of audibility. Output—7.0 watts. Circuit—Straight Class A. Tubes—57-2A5-2A5-5Z3. Controls—Master gain and tone compensator. Input Imp.—250,000 ohms—gain control to grid. Output Imp.—500, 250, 125, 15, 7, 5 and 2 ohms.

Mike Current—For one 2-button mike.
Field Current—For up to three 2,500 ohm fields.
Size—7x7x12 inches overall.
Weight—23 pounds.
LIST—L-7—Less tubes **\$34.20**
LIST—L-7—With Raytheon tubes **38.50**
LC-7—7-watt straight Class A amplifier is same as Model L-7 except that it has a low impedance input transformer for one double button mike.
LIST—LC-7—Less tubes **\$42.10**
LIST—LC-7—With Raytheon tubes **46.40**

ELECTRONIC FADER AND PRE-AMPLIFIER

For Diaphragm Crystal Mikes



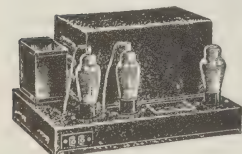
The 2-EN is designed as an input device for either one or two diaphragm type crystal microphone or one crystal microphone and one phonograph arm. Constant impedance is maintained at all degrees. The amplification factor in the 2-EN is more than sufficient to raise the output level of two diaphragm type crystal mikes for satisfactory use with any commercial amplifier.

SPECIFICATIONS:

Fader Positions—Two.
Inputs—For one or two diaphragm type crystal microphones or one same and one electric pickup arm.
Output—400 ohms or grid input.
Gain—20 db.
Frequency—Essentially flat 40-10,000 cycle.
Power Supply—180 to 250 volts dc—6 milliamperes, 2.5 volts—2 amps when using type 53 tube, 6 volts—8 amps when using type 6A6 tube. Note: Obtain low voltage from filament supply of your amplifier, and B voltage from B supply at most highly filtered point.
Tubes Used—One type 53, or one type 6A6.
List Price (less tubes) **\$18.00**

PRE-AMPLIFIER

For Ribbon—Crystal—Dynamic Mikes.

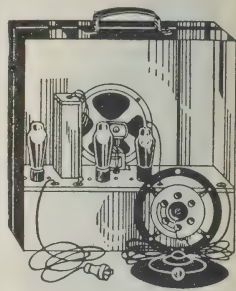


The L-1 Pre-amplifier supplies at an extremely low cost the gain necessary to operate these microphones with a standard power amplifier. Gain—42.8 db. with 200 ohm input. 79.3 db. with 1 megohm input. Noise Level—minus 104. db. on the input (zero level .006 watt). Frequency Response—plus or minus 1 db. from 50 to 12,000 cycles. Tubes Used—Two 6C6; one 84.

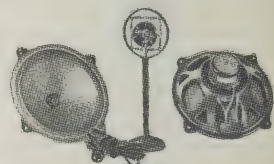
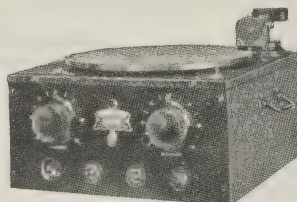
Output Impedance—400 and 100 ohms.
Power Supply—115 volts, 60 cycles.
Dimensions—Overall 7x7x12 inches.
Shipping Weight—20 lbs.
L-1 Pre-amplifier (less tubes)—List Price **\$41.30**

MIDGET PORTABLE P. A. SYSTEM

The Midget Portable is especially recommended for voice work as in window demonstrations, small meetings of 200 to 500 people, etc. It is a complete public address system in every respect, including 2-button carbon microphone, desk stand, 50 ft. of cord, tubes, dynamic speaker, and 2-stage amplifier with 3 watts maximum undistorted output. Tubes used are 1 No. 57; 1 No. 2A5; and 1 No. 80. System operates on 110 volts AC. The carrying case is metal with hard baked black crinkle finish. Volume control is mounted on the microphone stand. Quality is excellent with clear, crisp reproduction of voice. Connection is available for phonograph input. Dimensions 14x16x5 1/4 in. Midget Portable complete, Type No. 3-D **\$71.00**



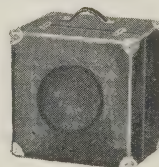
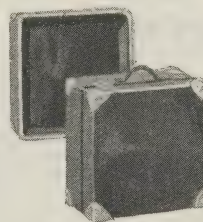
MOBILE SOUND EQUIPMENT 6-VOLT BATTERY OPERATED—20 WATTS



The power output of this equipment is more than adequate for most sound car installations, and in addition can be used for general public address work. Combined in one cabinet is a 20-watt three-stage amplifier, a 6-volt dualspeed motor, turntable and pickup, the necessary converter unit to change the 6-volt battery power to the proper voltage for the operation of the tubes, a control panel which has a dual input control system permitting fading microphone into phonograph, on and off switch and pilot light. The auxiliary equipment includes a two-button microphone of the stretched diaphragm type, 12-inch microphone stand with a 25-ft. microphone cable with polarized plug. Two 10-inch dynamic speakers, with 10-ft cord and plugs are also provided. These speakers are particularly designed for mobile work. A 6-volt heavy duty battery cable is also furnished. The extra drain on the battery, however, can be readily cared for by increasing the charging rate of the battery when the system is installed in an automobile or truck.

SPECIFICATIONS:

Number of stages—Three.
Tubes furnished—One 79, two 76, two 6A6.
Power Output—20 watts.
Input Impedance—For microphone and phonograph pickup furnished.
Output Impedance—Three ohms.
(To match the two speakers furnished.)
Power Supply—6-volt storage battery.
Over-all Dimensions of Amplifier Cabinet—11 1/4 x 14 x 16 inches.
Net Weight—65 lbs.
Shipping Weight—85 lbs.
LIST PRICE **\$240.00**



PORTABLE CARRYING CASES

for
P.A. SYSTEMS,
PHONO.
MOTORS AND
SPEAKERS
16x19x8 IN.

Model GC-430—A sturdily built case made of the strongest plywood covered with a heavy leatherette fabric. The corners are protected with brass fittings. All hardware is of the heavy duty type. Size 16x19x8 inches. Is built with room for elect. phono, motor or can house an amplifier, field supply and small speaker or large speaker and field supply. Two models—one plain and the other with speaker hole cut (covered with wire and cloth). A real value.

Model GC430P—Plain **\$13.90**
Model GC430H—With speaker hole **13.90**

No. FPA-11—Portable metal amplifier case 18x15x7 inches. Has chassis and speaker hole. Finished in black crystalline. A dandy unit to build an amplifier in **\$11.90**



Wright-DeCoster

Dynamic

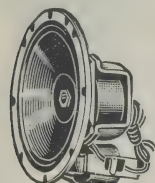


Radio Reproducers

Magnetic



Wright DeCoster Radio Reproducers are known as one of the highest quality lines made. They have always been the leaders in the industry in new, advanced designs and practices and are today more than ever, outstanding in both performance and value. Their 1936 contributions to the advancement of high fidelity sound reproduction feature—paracurve diaphragms and By-flux magnetic speakers. You haven't heard real modern, high fidelity audio until you've heard Wright DeCoster's Reproducers.



These speakers all have the famous Wright DeCoster patented, corrugated, solid center spider. Protects the air gap against dust and dirt. Finish is rustproof cadmium plate.

MODEL 390

5-in. D. C. Unit

Voice coil imp. at 400 cycles 4.2 ohms. Field coil dissipation, max. 6 watts, min. 3.5 watts; cone, 3 3/8 in.; O. D. of cone bracket, 5 in.; depth, 2-7/16 in.; approx. weight, 2 lbs.

Standard voice coil transformer matches single 43 output tube. Standard field coil resistance, 3,000 ohms.

Price\$3.90

MODEL 530

6-in. D. C. Unit

Voice coil imp. at 400 cycles 7.2 ohms. Field coil dissipation, max. 9 watts, min. 5 watts; cone, 4 1/2 in.; O. D. of cone bracket, 6 1/2 in.; depth, 3 1/2 in.; approx. weight, 3 1/2 lbs.

Universal voice coil transformer matches all output tubes. Standard field coil resistance, 2,500 ohms.

Price\$5.30

MODEL 630

8-in. D. C. Unit

Voice coil imp. at 400 cycles 5.2 ohms. Field coil dissipation, max. 12 watts, min. 6 watts; cone, 6 in.; O. D. of cone bracket, 8 1/4 in.; depth, 4 in.; approx. weight, 5 lbs.

Universal voice coil transformer matches all output tubes. Standard field coil resistance, 2,500 ohms.

Price\$6.30

MODEL 790

10-in. D. C. Unit

Voice coil imp. at 400 cycles 3.1 ohms. Field coil dissipation, max. 15 watts, min. 6 watts; cone, 8 in.; O. D. of cone bracket, 10 1/2 in.; depth, 4 1/2 in.; approx. weight, 5 1/2 lbs.

Universal voice coil transformer matches all output tubes. Standard field coil resistance, 2,500 ohms.

Price\$7.90
15% is added to the list price for speakers not having the standard specifications shown above.

MODEL 1750—12-INCH

Paracurve diaphragm. Voice coil imp. 2.6 ohms at 400 cycles. Field coil dissipation, max. 16 watts, min. 9 watts. Cone bracket 12 1/2 in.; cone, 10 in.; depth, 7 1/4 in.; weight, 17 lbs.

Universal voice coil trans. for all output tubes is furnished. Special trans. can be had at no extra cost. Standard field resistance, 2,500 ohms. No. 520A Field Supply is recommended for use with Model 1750.

No. 1750.....\$17.50



MODEL 1980—12-INCH

Paracurve diaphragm. Voice coil imp. 10 ohms at 400 cycles. Large voice coil 2 1/4 in. diameter; field coil dissipation, max. 18 watts, min. 12 watts. Cone bracket, 12 1/2 in.; cone, 10 in.; depth, 7 1/4 in.; weight, 17 1/2 lbs. Universal voice coil trans. for all output tubes. Special trans. at no extra cost. Standard field resistance, 2,500 ohms.

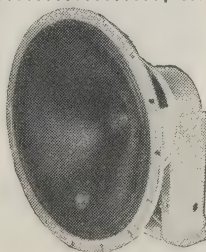
No. 1980.....\$19.80

MODEL 2940

12-INCH PARACURVE

Has weatherproof cone—fine for both outdoor and indoor sound installations. Specifications same as No. 1980 except has max. field dissipation of 22 watts, min. 15 watts. Depth, 8-5/16 in.; weight, 24 lbs. A real reproducer for quality P. A. jobs.

No. 2940.....\$29.40



A. C. FIELD SUPPLIES

New low prices on field supplies. Use one or more of these on your P. A. installations and get max. results from your speakers.



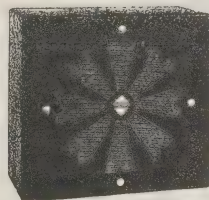
Model 470—By using the Model 470 Field Supply you may have the best 6, 8 or 10-in. A.C. speaker at a price not possible in past years. Uses one 25Z5 tube. Delivers a max. of 100 M.A. at 140 volts. Size 8 1/4 x 2 1/2 x 1 in.

Model 470—Less tubes.....\$4.70

Model 520—Designed to furnish separate A.C. field excitation for Models 1750, 1980 and 2940 reproducers. Size 8 1/4 x 2 1/2 x 1 in. Uses one 25Z5 tube. Delivers 100 M.A. at 170 volts.

Model 570—Less tube.....\$5.20

MULTI-PURPOSE MODEL REPRODUCERS



In black crystalline finish, all-metal cabinet with black and gray grille cloth.

Model 880—Equipped with 6-in. speaker. Univ. trans. matches all output tubes. 2,500 field.....\$8.80

Model 980—Equipped with 8-in. speaker. Univ. trans. to match all output tubes. 2,500 field.....\$9.80

SPEAKERS FOR TOBE-BROWNING RECEIVERS

Model 900B—Metal can as above with 6-in. speaker to match output of Tobe-Browning receivers. Complete with cable and plug\$9.00

Model 1000B—Metal can as above with 8-in. speaker to match output of Tobe-Browning receivers. Complete with cable and plug.....\$10.00

"CABINETTE"

Beautiful walnut finished cabinets of heavy wood with black walnut base and top. Rounded corners—moderne.

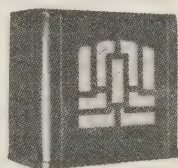
Model 1480—Equipped with 8-in. speaker with Univ. trans. to match all output tubes. Size 11 1/2 in. high, 13 1/2 in. wide, 7 in. deep.....\$14.80

Model 1640—Equipped with large 10-in. speaker with Univ. trans. to match all output tubes.....\$16.40

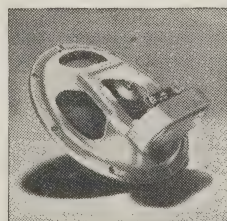
Model 2200B—Complete cabinet to house both set and speaker for Browning 35 set. Made of walnut finished wood with black walnut top and bottom. Equipped with 6-in. speaker to match the set. Size 20-1/16 x 17 1/4 x 11 1/2 in. deep.....\$22.00

Model 2000AS—Same specifications as Model 2200B but for All-Star set.....\$20.00

Model 550AS—6-in. speaker, matched for All-Star..... 5.50



WRIGHT DE COSTER HY-FLUX MAGNETICS



"Tomorrow's speaker—today!" New, revolutionary. Many new features. No rubber dampening or dustproofing. All-metal. Adjustable armature—for zero position or center. Molded cone—no seams or paper rattle. All bakelite coil form. The tone and power-handling ability will amaze you. Output transformers not required.

S = Single.

P = Push-pull.

Cat. No.	Cone	Pow.-Hdng.	List
No. WD400S	6-in.	2 watts	\$4.00
No. WD400P	6-in.	2 watts	4.00
No. WD450S	8-in.	3 1/2 watts	4.50
No. WD450P	8-in.	3 1/2 watts	4.50

The single seaker has an impedance of 7,000 ohms. The push-pull model has an impedance of 10,000 ohms, center tapped. The By-flux magnetics can also be purchased in the Model 880 metal cabinet shown above. Order:

No. 750S or P—For 6-in. in metal cabinet.....\$7.50

No. 800S or P—For 8-in. in metal cabinet..... 8.00



REPRODUCERS

VEHICLE SPEAKERS

6-Volt Models

The tone quality of most car radios can be improved by the installation of a new and larger speaker. Demonstrate—and make sales easy.



Model 390VC—5-inch speaker chassis—trans. matches 41 or 42 tube\$3.90
Model 530VC—6-inch speaker chassis—univ. trans. matches all output tubes\$5.30
Model 630VC—8-inch speaker chassis—univ. trans. matches all output tubes\$6.30

IN METAL CABINET—Illustrated Above

Model 680VS—6-inch speaker. Field resist. 4 ohms. Univ. trans. matches all output tubes. Cabinet of heavy metal—black crystalline finish with single stud or base mounting.....\$6.80

Model 780VS—8-inch speaker. Specifications same as Model 680VS\$7.80

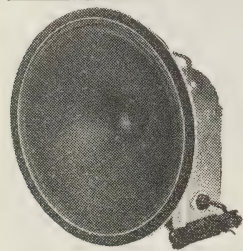
No. WDSAC—6-prong adapter with 3-ft. cord. Allows quick demonstration of W-D vehicle speakers.....\$1.00

STADIUM SPEAKERS

STADIUM "JUNIOR" 12-INCH. MODEL 4500

Paracurve Diaphragm

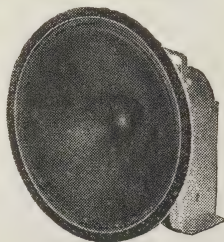
Field dissipation 17 to 25 watts. Power handling capacity, 13 watts. Five input impedances: 10, 500, 1,000, 1,500 and 4,000 ohms. Field resistance, 3,500 ohms to operate on 220 to 275 volts D.C. at 65 to 80 M.A. Weatherproof, 12 1/4 in. high; 8-1/16 in. deep. Weight, 28 lbs. Model 4500\$45.00



STADIUM SENIOR 12-INCH. MODEL 5800

Paracurve Diaphragm

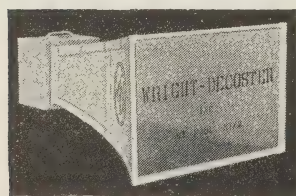
Power handling capacity. Field dissipation, 18 to 40 watts. Five input impedances: 10, 500, 1,000, 1,500, 4,000 ohms. Field resistance, 1,800 ohms to operate on 220 to 275 volts D.C. at 125 to 150 M.A. Completely weatherproof—the perfect heavy duty high fidelity reproducer. No. 5800.....\$58.00



STADIUM HORNS AND SPEAKERS

For Halls, Outdoor Installations, Sound Trucks, Etc.

MODEL 2050



A rugged weatherproof horn, 27 1/4 in. long; bell opening, 22 1/4 x 14 in.; weight, 15 lbs. Has 6-in. speaker with weatherproof cone with field resistance of 2,500 ohms. Field dissipation, 6 to 12 watts. Model 2050—Without voice coil trans.....\$20.50
Model 2300—With separate voice coil trans.....\$23.00
Model 900—Multi-impedance matching trans. Will take care of from one to six speakers having an output of either 500, 1,500 or 4,000 ohms.....\$9.00

MODEL 5000

SILVER "STADIUM" HORN

Guaranteed weatherproof. Reinforced and bound with metal. Screen across bell opening. Length over-all 48 in.; bell opening, 30x21 1/2 in.; weight, 80 lbs.....\$50.00

MODEL 6000

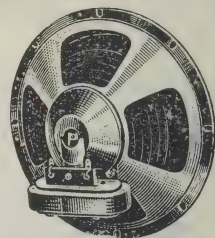
SILVER PORT-A-HORN

The portable horn with a dynamic cone type speaker. Not illustrated. The metal speaker housing which makes an excellent baffle by itself, is easily detached from the horn without the use of tools. Horn is weatherproof and built to stand rough handling. Speaker is 10 in. Field resistance, 6,000 ohms. Three impedances: 500, 1,500 and 4,000 ohms. Length of horn, 40 in.; bell opening, 28x18 1/2 in.; weight, 70 lbs.....\$60.00

RADIO SPEAKERS

UTAH "P. M." KINEMATIC MAGNETIC SPEAKERS

New type improved speakers with automatic impedance matching circuit. **USES NO FIELD CURRENT.** Will handle more volume without distortion than any non-dynamics speaker ever built. Speakers will carry 35 M.A. Output transformers not required.



S—Single. P—Push pull.

When ordering please specify Output Tubes.

Cat. No.	Cone	Power Handling Capacity	Price
6X-S	6 1/2 in.	2 watts	\$4.20
6X-P	6 1/2 in.	2 watts	4.20
8X-S	8 in.	3 1/2 watts	4.80
8X-P	8 in.	3 1/2 watts	4.80
12X-S	12 in.	6 watts	7.20
12X-P	12 in.	6 watts	7.20

S—Single output tube. P—P.P. output tubes.



SECURITY MAGNETIC SPEAKERS

New "ortho-acousti" type. Sold on a "money-back-satisfaction-guaranteed" basis.

No. QS-50—6 in.	\$2.40
No. QS-50—6 in.	2.40
No. QS-60—6 1/2 in.	3.40
No. QS-6D—6 1/2 in.	3.40
No. QS-80—8 in.	3.90
No. QS-8D—8 in.	3.90

O = Single output tube.
D = P. P.

RCA-VICTOR PERMANENT MAGNET DYNAMIC SPEAKERS

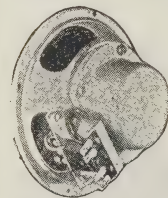
No. 9453—6 in. Uses new cobalt steel magnet. Requires no field excitation. Voice coil imp. 6 ohms. No output trans. supplied \$6.70
No. 9538—7 1/2 in. corrugated cone. 4 in. deep. 8-ohm voice coil. Less output transformer\$9.20
No. 9455—10 in. Heavy duty type. Ideal for P. A. Systems. 5 in. deep, 6-ohm voice coil. Less output trans.....\$12.00



SECURITY SPECIAL DYNAMIC SPEAKERS

A quality line of the latest type dynamics at value-plus prices. 3 1/2-ohm voice coils, 2,500-ohm fields. All have universal output matching transformers.

No. QD-5—5 in.	\$2.90
No. QD-6—6 1/2 in.	3.60
No. QD-8—8 in.	5.20



CABINET MODEL 8 1/2-INCH MAGNETIC SPEAKER

Handsome walnut finish table cabinet is 11 in. high, 10 1/2 in. wide, 6 1/4 in. deep. Equipped with 5 1/2 ft. cord. The speaker is a high quality "ortho" type magnetic, 8 1/2 in. cone.

No. OMC\$6.20

Cabinet Only—No Speaker

No. OMC1\$3.00



ALL ALUMINUM DIRECTIONAL BAFFLE



Entire unit is constructed of heavy gauge spun aluminum, reinforced, and free from any metallic resonance conditions. Has a special aluminum lacquer finish. This baffle permits a more even sound distribution, and effectively reduces bothersome feedback difficulties. It is ideal for installations where a small yet efficient baffle horn is required. Suitable for all 10, 11 and 12-inch speaker cones. Equipped with suspension rings. Dimensions: 12 1/2 in. deep by 10 in. deep; speaker opening, 10 1/2 in.; length of horn, 10 in.; bell, 17 in. in diameter. Over-all size, 17x20 in.

Shipping weight, 4 lbs.

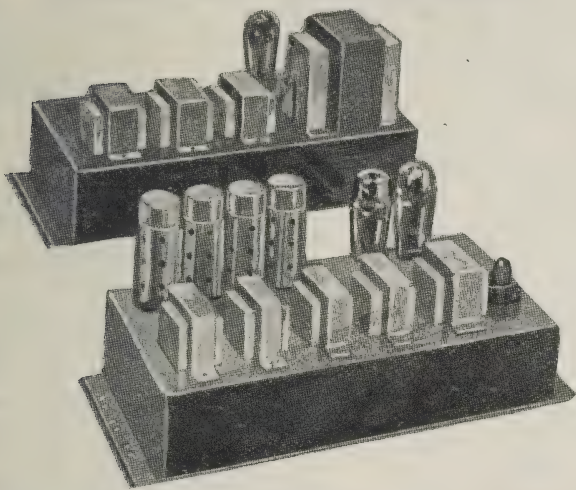
No. ASB—Complete\$15.90

No. ASB-R—Adapter ring for using speakers having cones less than 10 in......90

P. A. AMPLIFIER KITS

KENYON

SILVER GROUP AMPLIFIER KITS



Listed below are three amplifier kits of the very highest quality—all high gain units designed to work correctly with the new low-gain ribbon and crystal mikes. The transformers furnished are the famous Kenyon Silver Group. The frequency response of the audio transformers is much wider than found in the usual amplifier. The power supplies are of the heaviest duty type and are positively hum-free. Two chassis are furnished in each kit—one for audio and one for power supply. Size of each chassis is 19x8x3½ inches. PRICES SHOWN INCLUDE TWO CHASSIS AND ALL NECESSARY TRANSFORMERS AND CHOKES.

12 WATTS—CLASS A

No. SK101—Uses 2—57, 4—2A5, 1—5Z3. Features P. P. Par. 2A5's in Class A circuit. Gain 92.6db. Has input of 200 or 500 ohms line to grid. Output is to 8 ohms or to 500-ohm line. (Specify which)\$37.40
No. SK101PK—Complete kit of remaining parts necessary to finish the SK101 Amplifier Kit\$20.00

36 WATTS—CLASS A

A very high gain amplifier kit—featuring 116.4db gain. Tube layout: 4—57, 4—2A3's, Class A or 4—45's Class AB. 1—82, 1—83. Four stages of amplification. Input 200 or 500-ohm line to grid. Output is to 4 or 8-ohm voice coil or to 500-ohm line. (Specify which.)
No. SK102—Transformer and Chassis Kit. Complete....\$55.90
No. SK102PK—Complete kit of remaining parts necessary to finish the SK102 Amplifier Kit.....\$30.00

20 WATTS—CLASS B

Another high gain, four-stage amplifier kit giving 20 watts of undistorted audio output. Gain is 114.1 db. Tube layout: 4—57, 2—59, 1—83. Input 200 or 500 ohm line to grid. Output is to 4 or 8 ohm voice coil or to 500 ohm line. (Specify which.)
No. SK103—Transformer and Chassis Kit.....\$46.90
No. SK103PK—Complete kit of remaining parts necessary to finish the SK103 Amplifier Kit.....\$26.00
*Above prices do not include tubes.

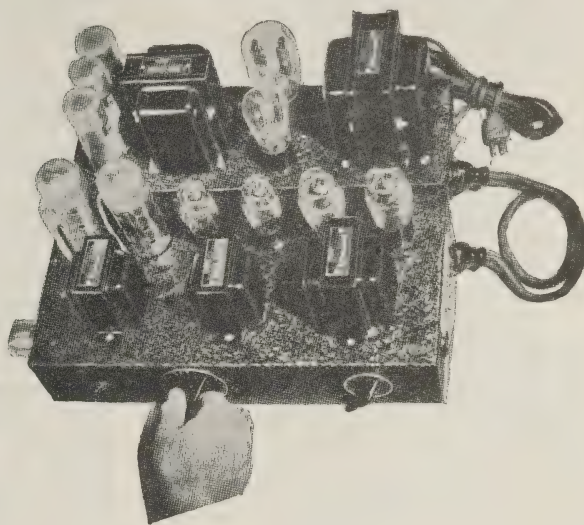
THORDARSON 30-WATT HIGH GAIN AMPLIFIER

Features:

- *30 watts undistorted power output.
- *10 tubes—four stages of amplification.
- *Gain 118.4 db. from a 100,000-ohm input.
- *Adapted to any type mike, 200-ohm line or 10,000-ohm high impedance radio or phono. circuit.
- *Provides current for carbon mike.
- *Handles one to six large dynamic speakers—supplies 30-watt field excitation power.
- *Two-unit base.
- No. T-7530—Foundation Kit—Consists of 2 separate drilled, stamped and finished (black crystalline) chassis with sockets, resistor and terminal strips already mounted. Also includes full detailed construction layout, complete information and diagrams\$9.60
- No. T-7530—Transformer Kit—Composed of one power trans., three filter chokes, two other chokes, one each input, output and audio trans.....\$40.10
- No. T-7530—Parts Kit—Includes all necessary resistors, volume and tone controls, filter and by-pass condensers, switches, tube shields, knobs, dials, cables, plugs, hardware, and a set of Raytheon tubes. Uses two 6C6, two 76's, four 2A3, one 83 and one 82.....\$40.00

THORDARSON

AMPLIFIER FOUNDATION UNITS



Three brand-new Thordarson designed and approved "Build-It-Yourself" amplifier kits that fill practically every P.A. or amateur radiophone requirement. Designed to work with the new low gain microphones (ribbon and crystal), these foundation kits incorporate everything that is new and desirable in sound amplification. Complete instructions on the definite and proper methods of construction are included with each kit. The chassis are of heavy gauge steel completely stamped and drilled and are finished in black crystalline making each an extremely attractive amplifier. Needless to say, the tone quality of each of these units is superb—due to the use of the famous Thordarson Audio Components. Hum is kept at negligible level through the use of the heavy duty matched unit Thordarson Power Transformers and Chokes.

THORDARSON 6-WATT HIGH GAIN AMPLIFIER

These features make it the outstanding amplifier of its size:

- *Any type mike can be used without changing the circuit.
- *One 5,000 or one or two 2,500-ohm field dynamic speakers supplied from 10-watt field supply.
- *Gain —106.25 db. from crystal mike.
- *New input circuit—low and high impedance terminals, or line input.
- *Mike current supplied for 2-button carbon mike.
- *Uses two 6C6, two 42's in Class A and an 80.
- *Can be used in cars on 6-volt battery and genemotor.

No. T7506—Foundation Unit—Consists of chassis, completely drilled with 7 sockets mounted in place, sub-assembly base and resistor mounting strips together with detailed instructions, diagrams, etc.....\$5.40

No. T7506—Transformer Kit—Consists of one power trans., one output trans., one input trans. and three filter chokes..\$19.30

No. T7506—Parts Kit—Includes all necessary resistors, volume and tone controls, filter and by-pass condensers, switches, tube shields, knobs, dials, cables, plugs, hardware and set of Raytheon tubes. Uses two 6C6, two 42's, one 80.....\$23.50

THORDARSON 18 WATT HIGH GAIN AMPLIFIER

Features:

- *Any mike can be used without changing circuit.
- *One 5,000 or two 2,500 or four 1,250-ohm field dynamic speakers may be used—25-watt field supply.
- *Gain of 114.9 db. from crystal mike.
- *New input circuit—over-all gain compensated for any type input circuit
- *Low and high impedance input terminals.
- *Two-unit base for rack-and-panel, portable or shelf use.
- *Pre-amplifier is an integral part of circuit.
- No. T7518—Foundation Kit—Composed of 2 separate drilled, stamped and finished (black crystalline) chassis with sockets, resistor strips and terminal strips already mounted.....\$7.20
- No. T7518—Transformer Kit—Consists of one power trans., one input and one output trans., one audio trans., two filter chokes and three other chokes.....\$35.00
- No. T7518—Parts Kit—Includes all necessary resistors, volume and tone controls, filter and by-pass condensers, switches, tube shields, knobs, dials, cables, plugs, hardware and a set of Raytheon tubes. Uses two 6C6, two 76's, two 42's, one 83, one 82.....\$31.50

CARRON REPLACEMENT SPEAKER CONES

Part No.	Manufacturer	O. D.	List
AIR-LINE (Mont. Ward & Co.)			
1122 Models 28-22, 28-95; 10,000			
6200; 14,000 (Utah A100)	9	\$2.70	
1109 Models 1800; 14, 11.....	8½	2.40	
1117 Models 1238, 1838, 13, 15, 16, 18 (Utah Large Cub No. 2).....	7½	2.50	
1123 Models 2955, 3065 (Utah Stad.).....	12	3.00	
1118 Models 52, 45, 47, 70, 72, 84, 94, 79, 49, 76 (Utah Large Cub No. 3).....	7½	2.60	
1049 Models 360 (Magnavox 130).....	8½	2.60	
1039 Models 24 (Jensen D15).....	8½	2.30	
1114 Models 1420 (Utah Cub 2 pt.).....	6	2.30	
1115 Models 45, 47, 70, 72, 81 (Utah Cub, 3 pt.).....	6	2.30	
1037 Models 89, 24 (Jensen D9).....	11½	2.80	
1172 Models 96, 98, 104 (Operadio).....	5	1.80	
1119 Models 33-25; 62,000, 11,000, 33-35 (Utah Little Giant No. 1).....	8	2.20	
1035 Models 2955 (Jensen D8).....	11½	3.00	
1076 Models AE10 (Oxford) 3 pt.....	10	2.30	
1038 Models 83 (Jensen D11).....	8½	2.70	
1074 Models 11,000, 33-35 (Oxford).....	8½	2.50	
1137 Models 11,000, 33-35 (Jensen D12, D14).....	8½	2.90	
ATWATER KENT			
1000 Pt. No. 15142, for Models 43, 46, 55, 60, 66, 67, 64, F4.....	10½	2.40	
1001 Pt. No. 14374, for Models 43, 46, 55, 60, 66, 67, 64, F2.....	10½	2.40	
1002 Pt. No. 19465, for Models 80, 82, 84, 558, 627, 87, 90, 92, 87. Early Models 83, 85.....	8	2.00	
1003 Pt. No. 18081, for Models H2, L, F, P, H.....	10½	2.40	
BEST			
1006.....	6½	2.60	
1159 D5.....	5	2.00	
1160 D65.....	6	2.40	
BOSCH			
1007 Models 48, 58.....	9½	2.90	
BRUNSWICK			
1017 Model 10 (Clarion 60).....	8½	2.60	
1012 Model D, 11, 12.....	9	2.60	
1013 Models 16, 18, 33, 17, 24, 25.....	12	3.00	
CLARION			
1017 Models 60, 80, 81, 85, 90, 91, 100, 120, 25-60.....	8½	3.00	
1018 Models 51, 53, 55, 25-51, 25-53, 25-55.....	12	3.30	
1019 Models 85, 120, 94, 25-94, 160, 25-160.....	10	3.00	
COLONIAL			
1098 Model 36 (Symington).....	9½	3.00	
1026 Models 33, 38.....	12½	3.20	
1208 Models 37, 44, 52, 85, 62, 97, 51, 53.....	9½	3.00	
CROSLEY			
1027 M45, Models 262, 425, 625, 40S, 30S, Dynacoil.....	9	2.40	
1117 Model 124 (Utah Large Cub No. 2).....	7½	2.50	
1037 Models 124, 127 (Jensen D9-I. S.).....	11½	2.80	
1053 Model 124 (Magnavox 144).....	7½	2.70	
1118 Model 125 (Utah Large Cub No. 3).....	7½	2.60	
1055 Model 135 (Magnavox 154).....	8	2.80	
1115 Model 148 (Utah Cub 3 pt.).....	6½	2.40	
1211 Model 159.....	6½	2.40	
1281 Model 166.....	5	2.00	
1212 Models 167, 103.....	6½	2.10	
1167 Model 167 (Rola F4).....	5	2.00	
1221 Model 170 (Magnavox 152X).....	10	3.30	
1139 Model 173 (Jensen K3).....	6	2.10	
1043 Model 175 (Jensen T3).....	5	2.00	
1237 Models 214, 346-2.....	5	2.00	
1049 Model 269 (Buddy Boy).....	8½	3.00	
1050 Model 249 (Magnavox 138).....	8½	2.60	
1200 Model 325-4 (Magnavox 154, 2 pt.).....	8	3.00	
EVER READY			
1048 Models 30, 40 (Magnavox D7).....	9	3.00	
1028 Models 50, 52.....	10	3.00	
1007 Models 52 (Bosch 48).....	9½	3.30	
1026 Models 50, 52 (Colonial 33).....	12½	3.20	

Part No.	Manufacturer	O. D.	List
FADA			
1029 Models KO-C, 10 Series, Shallow.....	8½	\$3.30	
1030 Models 20, 32, 15, 25, 15B, 15C, 15 Series Deep.....	8½	3.30	
1133 Models KU45, 65, 41, 412, 42, 422, 44, 46, 47, 12A-12B.....	10½	3.50	
*GENERAL ELECTRIC			
1088 *Models T41, H31, H51, H34, H72, S22, S132, K62, S42B (RCA 106).....	10½	2.40	
1089 *Models J80, J85, J75 (RCA 48).....	10	2.00	
1163 *Model J125 (RCA R78).....	10	2.10	
1164 *Model J82 (RCA R71).....	7½	1.80	
1165 *Models J100, J105, J107, J109 (RCA R74).....	10	2.10	
1091 *Models B40, 65.....	5	1.20	
1134 *Models RL-56-1.....	5	1.50	
1215 *Models K60, K65, K63, K64, B81, B86, K58.....	6½	1.50	
GENERAL MOTORS			
1084 Model 120 (Rola "J").....	9½	3.30	
1085 Model "Little General" (Rola "K").....	7½	2.70	
1080 Model 1907 (Rola F5).....	6	2.20	
*GRAYBAR ELECTRIC			
1088 *Models GB678, GB700, GB770, GB900, GB100 (RCA 106).....	10½	2.50	
1089 *Models GB8, GB989, GB9, GB7, GC14, GC13, GT8 (RCA 48).....	10	2.00	
1163 *Models GT8-56 (RCA R71).....	7½	1.80	
1164 *Models GT10-69, GT10-88, GC10-99 (RCA R74).....	10	2.20	
JENSEN			
1136 D1—Used in Silver Marshall, Model JT.....	6½	2.70	
1134 D4, D5.....	9½	3.00	
1035 D7, D8, Used in Dayton Navigators, Sparton 737, 921, Silver Marshall C, etc., Air Line 2955, Howard "Green Diamond," Gulbransen 727, Grebe AH1, SK4, Edison R7, Kennedy 22, etc.....	11½	3.00	
1036 D9 (Outside Spider).....	11½	3.00	
1037 D9 (Inside Spider) used in Zenith 92, Crosley 124, 127, Kennedy 50, etc., Silver Marshall AEC, etc., Air Line 89, 24.....	11½	2.80	
1038 D10, D11, used in Air Line 83, Kennedy 42.....	8	2.70	
1137 D12, D14, used in Silver Marshall 782, Lyric "J" Jr., Air Line 11,000, 33-35.....	8½	2.90	
1039 D15, used in Sparton 600 Series, Airline 24, Kennedy 62, 56, Lyric S6, S7.....	8½	2.30	
1040 D16, used in Majestic 311, Kennedy 52A, etc.....	8	2.50	
1217 D17.....	7½	2.70	
1044 D19 (Short 3 pt. Spider).....	10	3.30	
1300 D19 (Long 3 pt. Spider).....	10	3.30	
1301 D19 (Inside Spider).....	10	3.00	
1041 DA5, Auditorium.....	13	5.50	
1302 DA7, Auditorium.....	13	5.50	
1042 J1, J2, used in Stewart Warner 206A.....	6½	2.10	
1139 K1, K2.....	6½	2.10	
1218 K3, K4.....	6½	2.10	
1307 KS4 used in Motorola Dual 6.....	6½	2.40	
1140 P. M. 1.....	8½	2.70	
1184 P. M. 2.....	8½	2.70	
1285 Series "R".....	6	2.20	
1286 Series "R".....	5	2.00	
1138 T1, T2.....	5	2.00	
1043 T3, used in Crosley 343, 175 Roamio.....	5	2.00	
KENNEDY			
1017 Model 20 (Clarion 60).....	8½	2.90	
1037 Model 220 (Jensen D9).....	11½	2.80	
1035 Models 22, 26, 30, 36, 38, 40 (Jensen D7).....	11½	3.00	
1038 Model 42 (Jensen D11).....	8½	2.70	
1119 Models 50, 63, 63A (Utah Little Giant No. 1).....	8	2.80	
1037 Models 50, 56, 62, 64, 220 (Jensen D9).....	11½	2.80	
1039 Models 52, 56 (Jensen D15).....	8½	2.30	
1040 Models 62A, 62D, 66B (Jensen D16).....	8½	2.50	
KOLSTER			
1141 K70, K20, K60.....	8	2.90	
1219 B-15.....	9½	3.20	
1045 K90, K43, K44, K45, K48, 920.....	12	3.40	
1083 K60 (Rola F6).....	8	2.40	

Part No.	Manufacturer	O. D.	List
LYRIC (All-American Mohawk)			
1047 Model D No. 9.....	10½	\$3.00	
1039 Model S6, S7 (Jensen D15).....	8½	2.30	
1137 Model "J" Jr. (Jensen D12).....	8½	2.80	
1143 Model S80.....	8	2.70	
1144 Model S8.....	10	3.00	
1138 Model C-4 (Jensen T1).....	5	2.00	
1081 Model S-50 (Rola F5).....	6½	2.20	
MAGNAVOX			
1048 Models D7, D8, D6, 80, 90, 100, used in Sparton 737, 931, Newcomb-Hawley NH9, Eveready 30, 40, Bosch 29A, Kellogg 523.....	9	2.90	
1049 Models 130, 136, used in Airline 360, Crosley 269, Zenith A, B, C, D.....	8½	2.60	
1050 Models 130, 138, 401, used in Crosley 249, Columbia 110, Audiola 31, Sparton 600, Jackson-Bell 68, 88, 89A, 89, 90.....	8½	2.60	
1051 Models 140, 142.....	9½	2.80	
1052 Models 140, 143.....	11½	2.90	
1053 Models 140, 144, used in Crosley 124.....	7½	2.70	
1054 Models 150, 2 pt., used in Sparton 333.....	6	2.70	
1057 Model 150D, Inside Spider, used in Columbia C-80-A.....	6	2.40	
1055 Model 154, Inside Spider.....	8	2.70	
1200 Models 154D, 158, 2 pt., used in Motorola Twin 8, Crosley 325-4.....	8	3.00	
1056 Models 101, 105, 107, 109, 201, 401, 403, 405 (shallow).....	11½	3.40	
1145 Models 410, 412, 414, 416, 418, 116, 118, 210 (deep).....	11½	3.70	
1259 Model 111.....	11½	3.40	
1221 Models 152X, 160, used in Crosley 170.....	10	3.30	
1185 Models M44, 158, 165, used in Motorola 44.....	5	2.00	
1242 Model 195.....	5	2.00	
MAJESTIC			
1058 G1 for Models 71, 72.....	9	2.20	
1059 G2 for Models 71, 72, 91, 92, 181.....	9	2.20	
1060 G3 for Models 90, 91, 93, 101, 102, 103.....	10	2.20	
1061 G4 for Model 130.....	10	2.20	
1062 G5 for Models 131, 132, 233, 61, 62, 163.....	12	3.20	
1063 G6 for Models 51, 52, 53, 10.....	12	2.60	
1064 G7 for Model 21.....	10	2.60	
1065 G8 for Model 22.....	12	3.20	
1066 G9 for Model 23.....	12	3.20	
1067 G10B, G10C, G10D, G10E for Models 151, 153, 154, 155, 156.....	7½	2.20	
1068 G11B, G11C for Models 251, 253, 254, 201, 203, 204, 211, 214.....	10	2.80	
1069 G13B, G13C for Models 353, 215.....	12	2.50	
1070 G14, G14B, G14C, G14D, G14E, G14F for Models 351, 353, 223, 221, 407.....	12	2.20	
1040 GJ16B for Model 311 (Jensen D11).....	8	2.60	
1071 G19A, G19B, G19C, G19F, G19G for Models 291, 293, 294, 303, 304, 324, 314.....	10	2.20	
1072 G22A, G22B, G22C, G22D, G22E, G22K for Models 336, 344, 363, 393.....	12	2.20	
1151 G5, Improved Type, Models 131, 132, 233, 61, 63, 163.....	12	3.20	
1152 G6, Improved Type, Models 51, 52, 53.....	10	2.60	
1153 G7, Improved Type, Model 21.....	10	2.60	
1154 G8, Improved Type, Model 22.....	12	3.20	
1155 G9, Improved Type, Model 23.....	12	3.20	
1156 G24 for Model 116—Ford Auto.....	6	1.80	
1157 G25 for Model 381—Pirate Chest.....	5	1.60	
1158 G26A, G26C for Models 371, 373, 411, 413, 411A, 413A.....	5	1.70	
1159 "Best D5" for Models 371, 373.....	5	2.00	
1160 "Best D65" for Model 331.....	6	2.30	
1284 G28A for Model 460A.....	8	2.80	

CARRON REPLACEMENT SPEAKER CONES

Part No.	Manufacturer	O. D.	List	Part No.	Manufacturer	O. D.	List
OPERADIO				UTAH			
1172	Used in Sentinel 560, Truetone, Airline 96, 98, 104, Arvin 10, Wells Gardner 05Z.....	5	\$2.00	1114	Cub 6C, 2 pt. Spider, used in Airline 1420, Zenith 705.....	6	\$2.30
1261	Inside Spider.....	6	2.20	1115	Cub, 3 pt. Spider, used in Airline 45, 47, 70, 72, 81, Crosley 148.....	6	2.40
1268	Used in Sentinel 600, Arvin 20A.....	6½	2.60	1116	Large Cub, No. 1 Speaker 8L, Inside Spider.....	7½	2.30
OXFORD				1117	Large Cub, No. 2, 2 pt. Spider, used in Crosley 124, Airline 1238, 1838, 13, 15, 16, 18.....	7½	2.50
1162	Joy Kelsey Type Model 23.....	10	2.70	1118	Large Cub No. 3, 3 pt. Spider, used in Crosley 125, Airline 52, 45, 47, 70, 72, 84, 94, 79, 49, 76.....	7½	2.60
1186	Joy Kelsey Type.....	8	2.60	1119	Little Giant No. 1, Inside Spider, used in Isodyne, 700, 749, Zenette, Airline 33-25, 62,000, 11,000, Kennedy 50, 63, 64.....	7½	2.20
1074	Models 23, 31, 59, 24, used in Airline 11,000, 33-35.....	8½	2.50	1120	Little Giant No. 2, 2 pt. Spider.....	7½	2.70
1075	2 pt. Spider (oval).....	10	2.70	1121	Little Giant No. 3, 3 pt. Spider.....	7½	2.70
1076	Models 23, 31, 59, 24, used in Wells Gardner No. 9, Gulbransen 62, Airline AE10.....	10	2.30	1122	A100, D200, used in Airline 28-22, 28-95, 10,000, 6200, 14,000, Balkett.....	8½	3.20
1077	Models 70, 72, 67, used in Zenith 52.....	12	2.90	1123	Stadium, 66A, 66B, used in Airline 2955, 3065.....	11½	3.40
*PHILCO				1170	P10, used in Radiochron.....	8½	2.50
1078	*Pt. 36-3170, Models 40, 41, 42, 65, 76, 77, 87, 90, 95, 96, 111, 112.....	10½	1.60	1230	Model 12B, 3 pt. Spider, 16 ohm VC.....	12	3.40
1079	*Pt. 02996, Models 3, 20, 21, 46, 70, 90, 470, 490.....	8	1.40	1304	Model 12B, 3 pt. Spider, 1.1 ohm VC.....	12	3.40
1203	*Pt. 02861, Models 5, 48, 50, 80, 81, 52.....	5½	1.20	1231	Model 12A, Inside Spider.....	12	3.30
1243	*Pt. 36-3000, Model 53.....	5½	1.20	1296	Model 12A, 3 pt. Spider.....	12	3.40
1244	*Pt. 36-3029, Models 54, 57.....	5½	1.20	1201	Model 5D, used in Motor-ola 44, Emerson KS-38, Atwater Kent 155, Grunow 501, 550.....	5	1.80
1245	*Pt. 36-3159, Models 6, 7, 8, 9, 10, 12, 14, 15, 19, 43, 47, 71, 89, 91.....	7½	1.20	1205	Model 62E, used in Zenith 462, 650, 808.....	6½	2.40
1246	*Pt. 36-3014, Models 38, 60.....	7½	1.20	1271	Model 6L, used in AK666, Motorola Super 6.....	6½	2.40
1247	*Pt. 2898A, Model 86.....	9	1.80	1111	Model 10A, used in Apex Model 10B.....	10	2.90
1248	*Pt. 02625, Models 14, 15, 44, 91.....	10½	1.60	1295	Model 10C, 2 pt. Spider.....	10	2.90
1249	*Pt. 36-3061, Models 16, 17.....	10½	1.60	U. S. APEX GLORITONE			
1269	*Pt. 02887, Models 35, 37, 50, 51.....	8½	1.40	1103	Model 20, Speaker 2714.....	6	2.20
*RCA-VICTOR				1104	Model 26, Speaker 2286.....	8½	2.00
1087	*Nos. 104, 105.....	8	2.40	1105	Model 26A, Speaker 2467.....	8	2.00
1088	*Pt. 8558, Speaker 106, Models RE20, R34, R35, R39, R50, R55, RE57, RAE59, RAE79, R80, R82, R86.....	10½	2.40	1106	Model 26P, Speaker 2758.....	8	2.00
1089	*Pt. 8601, Models 48, R6, R7, R-7A, R-7LW, R8, R9, R-9DC, R-10, R-10DC, R-11, R12, R14, R15, RE16, RE-16A, RE17, RE18, RE-18A, RE19, R21, RO-23, RAE-26, CE-29, R34, R42, R-43DC, RE73.....	10	1.80	1107	Model 26P, Speaker 2925.....	8	2.20
1090	*Photophone.....	14½	3.40	1108	Model 26P, Speaker 3261.....	8	2.20
1091	*Pt. 9023, M34, M105.....	5	1.20	1109	Model 27, Speaker 1936.....	8½	2.00
1236	*Pt. 8987, Models R28, R28P, K22, R-28EW, RE-40, RE40P, 100, 101, 110, 111, 114, 115, M116, 300, 301.....	5	1.20	1110	Model 8A, Speaker 2801.....	8	2.20
1225	*Pt. 9428, Models R37, R37P, R38, R38P, 112, 120, 121, 122, 124, 126B, 142B, 241B, 310, 320.....	6½	1.30	*VICTOR			
1163	*Pt. 8916, Models R78, CRD-9AC, CRD-9DC, RAE-84.....	10	2.10	1124	*R 32, 45, 75, 52.....	9	1.60
1164	*Pt. 8921, Models R71, R71B, SWA-3, R24.....	7½	2.00	1038	*RE 57, 34, 35 (RCA 106).....	10½	2.40
1165	*Pt. 8935, Models R74, R70, R76, R75, R76, R77, RE81, 128, 128E, 210, 211, 221, 223, 224, 224E, 322, 322E.....	10	2.10	WELLS-GARDNER			
1166	*Photophone.....	7½	2.00	1076	No. 9 (Oxford 3 pt.).....	10	2.30
1124	*Pt. 10801, Models R32, R35, E35, RE45, R52, R75, E-135, E152, RE154, RE156.....	9	1.60	1167	Model 621 (Rola F4).....	5	2.00
1164	*Pt. 7236, Models R5, RX5, R-5DC (RCA R71).....	7½	1.20	WRIGHT DECOSTER			
1164	*Pt. 7442, Model R4 (RCA R71).....	7½	1.20	1125	Model 155, used in Motor-ola 6, 61, 88.....	6½	2.40
1164	*Pt. 7594, Models R17-M, R27 (Magnetic), (MAG5).....	5	1.20	1126	Model 107.....	12	3.50
1134	*Pt. 7598, Models R-18W, R27 (Dynamic), GE R27 (56).....	6½	1.20	1127	Model 207.....	12	3.50
1164	*Pt. 8359, Model R22 (RCA 100).....	10	1.80	1128	Model 345, used in Motor-ola 88, 61.....	8	2.90
1164	*Pt. 8829, Models M30, P31 (RCA R71).....	7½	1.20	1129	Model 107.....	10	3.30
1164	*Pt. 8962, Model M32 (RCA R71).....	7½	1.20	1232	Model 275.....	5	2.20
	*Pt. 8869, Models RE80, AVRI, AVR-SA, R72, R73A, R75A, R90, R90P, 140, 141, 141E, 220, 222, 240, 242, 260, 261, 262,			1292	Model 225.....	12	3.50
				1305	Models 265, 790.....	10	2.90
				GENUINE WRIGHT DECOSTER			
				WD200CA	Model 390.....	5	2.00
				WD225CB	Model 530.....	6½	2.25
				WD250CC	Model 630.....	8½	2.50
				WD275CD	Model 790.....	10½	2.75
				WD400CE	Model 1980.....	12½	4.00
				WD400CF	Model 2940.....	12½	4.00
				WD500CG	Model 4500.....	12½	5.00
				WD500CH	Model 5800.....	12½	5.00
				WD500CJ	Model 107.....	10½	5.00
				WD500CK	Model 107.....	12½	5.00
				WD500CN	Model 207.....	12½	5.00
				WD500CH	Model 305.....	12½	5.00
				WD500CL	Model 309.....	12½	5.00
				WD500CG	Model 315.....	12½	5.00
				WD500CM	Model 319.....	12½	5.00
				WD400CF	Model 325.....	12½	4.00
				WD400CE	Model 425.....	12½	4.00
ZENITH				ZENITH			
				1049	Models 52, 72 (Oxford).....	12	2.90
				1077	Models 52, 72 (LL18).....	12½	2.90
				1099	Models 52, 72 (Magnavox 10½).....	11½	3.50
				1016	Model 92 (Jensen D9).....	11½	2.80
				1037	Model 103 (Peter-Smith).....	12	3.50
				1130	Models A, B, C, D (Magnavox 126).....	8½	2.60
				1119	Models "Zenette" (Utah Little Giant No. 1).....	7½	2.20
				1114	Model 705 (Utah Cub).....	6	2.30
				1291	Model 755 (Jensen D16—3 pt. Spider).....	8	2.50
				1205	Models 650, 462, 808 (Utah 62E).....	6½	2.40
				1251	Model Jr. No. 7 (Jensen T5).....	5	1.80
				1199	Model 825 (Jensen).....	6½	2.40

Speaker Accessories



CARRON SPEAKER CENTERING SHIMS

For adjusting cone in pole piece. 16 shims assorted in 4 sizes—.005, .0075, .010 and .0125 in. In handy leather case.

\$0.70 Per Set.



EVEREADY SERVICE CEMENT and SOLVENT

Cement—specially prepared for cementing new cones, for repairing rattling cones, loose tube bases, etc. Is quick-drying, waterproof.

Large 2-oz. bottle.....**\$0.60**
Solvent—for loosening old cement on radio parts and is a good cleaner. Can be used to thin the cement.

2 oz. bottle.....**\$0.30**



DIAL LITE COLORING

Modern radio receivers use colored dial lites, making it necessary for servicemen to have this kit. Five colors as shown in illustration. Instant drying.

No. EDL—Per kit.....**\$0.60**

COLOR CODING ENAMEL

Handy item for coding coil forms, jacks, terminal strips, etc. Four bottles of enamel—green, blue, red and yellow—and one bottle of thinner, together with four brushes.

No. A190.....**\$0.60**

BAKELITE CEMENT

Practically the only cement made for sticking bakelite to bakelite, glass, metal parts, etc. Handy for cementing loose inserts, moldings, tube bases, caps, etc. Finds many uses in the shop.

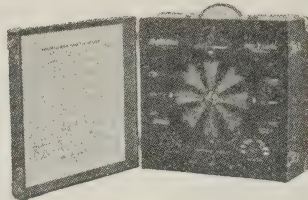
No. BC2.....**\$0.42**



EVEREADY LIQUIDOPE

An ideal coil dope, specially prepared for holding windings to coil forms. Tightens the windings and gives an all-weather coat to windings as well as protection against scratches, etc. 2 oz. bottle.

No. ED2.....**\$0.60**



WRIGHT-DECOSTER MULTI-TEST SPEAKER

\$30.00 List

- * Universal output transformer.
- * Universal voice coil transformer.
- * Universal field coil transformer.
- * Matches all tubes.

- * Matches all output transformers.
- * Matches all set field combinations.

HOW TO GET ONE

Upon deposit of \$15.00 with us, we will ship you a Wright-DeCoster Multi-Test Speaker. We will accept 75 of these Wright-DeCoster coupons any time on or before the expiration date of this offer as a merchandise credit of \$7.50 against your deposit of \$15.00. Thus making this Wright-DeCoster Multi-Test Speaker

Cost You Only \$7.50

These valuable coupons are packed with all Wright-DeCoster products:

- 1 coupon with each Model 5 and 6-inch speaker.
- 2 coupons with each Model 8-inch speaker.
- 3 coupons with each Model 10-inch speaker.
- 5 coupons with each Model 12-inch speaker.
- 10 coupons with each stadium model speaker or horn.

This offer expires January 1, 1937.



BLACK CRYSTALLINE LACQUER

This lacquer will give any metal part that professional appearance. You can easily crackle your own panels, chassis, etc. Complete directions furnished.

No. CL2.....**\$0.42**

No. CP—Pint can.....**1.50**

HIGH VOLTAGE INSULATING CAMBRIC

Breakdown Voltage, 10,000 Volts

Used in building transformers, repairing field coils, etc. This is a dry yellow cambric that is dependable and safe. Handy for servicemen as well as amateurs. Over 210 square inches in the roll.

No. RS—Per roll.....**\$0.60**



CARRON REPLACEMENT FIELD COILS

APEX GLORITONE

Part No.	Model Speaker	I. D. In.	O. D. In.	L. In.	Ohms	Price
3000	20	2714	1	2 1/4	7 1/2	\$3.50
3001	26	2286	1 1/4	2 1/2	1 1/2	4.00
3002	26A	2467	1	2 1/4	1 1/2	4.00
3003	26P	2758	1	2 1/4	1 1/2	4.00
3004	26P	2925		2 1/4	1	4.00
3005	26P	3261		2 1/4	1 1/2	4.00
3006	27	1936	1 1/4	2 1/4	1 1/2	4.00
3007	32	2505	1	2 1/4	1 1/2	4.00
3008	8A	2801		2 1/4	1	3.75
3009	10B	2802	1 1/4	2 1/4	1 1/2	4.00
3010	99A	3261	1 3/4	2 1/4	1 1/2	3.75
3012	46		1 1/4	3	3	6.00

ATWATER KENT

3017	Models 46, 53, 47 (Speaker F2) Early, Late 55K.....	1.700	6.00
3018	(Speaker F4) Early and Late, 55, 60..	1.100	6.00
3019	(Speaker F6) Early and Late, 61, 66..	700	6.00

BRUNSWICK

3024	Models D11, 12.....	2.400	4.20
3025	Model 16.....	2.500	4.20

CROSBY

3040	Model M45	350	3.90
3041	Model M45	1,500	4.40
3042	Model M45	2,500	4.80
3043	Model 269	10,000	4.00
3044	Model 120	2,300	4.00
3045	Model 132	5,000	4.00
3046	Model 158	8,500	4.00
3047	Model 167	900	3.50
3048	Model 249	2,500	4.00
3049	Model 125	1,300	3.50

ERLA

1038	Model 271 (Jensen D11).....	8 1/2	2.40
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*JENSEN

3057	Models D4-D5	2,250	4.40
3058	Models D7-D8	1,500	4.40
3059	Models D7-D8	2,500	5.00
3060	Models D9-D15	550	2.50
3061	Models D9-D15	1,000	2.60
3062	Models D9-D15	1,650	2.60
3063	Models D9-D15	1,800	2.60
3064	Models D9-D15	2,500	2.50
3065	Models D10-D11	720	2.50

*JENSEN—Continued

Part No.	Model Speaker	I. D. In.	O. D. In.	L. In.	Ohms	Price
3066	*Models D12-D14				2,300	\$2.60
3067	*Model D16				1,000	2.50
3068	*Model K1				2,500	2.50
3069	*Model K2				4.2	2.20
3070	*Model K2				2,500	2.50
3071	*Model K3				3,200	2.50
MAGNAVOX						
3075	9 in. (Medium) D7, D8.....				2,500	6.50
3076	9 in. (Medium) D7, D8.....				7,500	7.50
3077	Early Model.....				2,500	6.35
3078	Model 126				4,000	4.00
3079	Model 130				3,000	4.00
3080	Model 138				2,500	3.45
3081	Model 150				4,000	4.00
3082	Model 154				2,500	4.00
3083	Model 12 in.....				2,500	5.50

PHILCO

3129	*Model 20.....				3,100	2.00
3130	*Models 86, 87, 65, 95, 76, 96, 77.....				3,200	4.50
3195	*Model 70				3,600	2.00

RCA-VICTOR

3131	Model 46				2,500	4.00
3132	Model 66				7,000	4.75
3133	Model 106				550	4.20
3134	Model 106				6,000	5.00
3135	Model 41				500	4.00
3136	Model RC3				3,000	4.00

ROLA

3137	Model F4				3,000	2.75
3138	Model F5				1,800	2.85
3139	Model F6				2,500	3.50
3140	Model K				4,700	4.00
3141	Model K7				2,500	3.75

STEWART-WARNER

3149	Model 950				10,000	8.00
3150	Model R202				10,000	4.00
3191	Model 102A				1,500T	6.00
3192	Model 205A				1,000T	6.00

UTAH

3164	Model 9 in. A-100.....				2,500	6.00
3165	Model Little Giant (Isodyne).....				2,500	3.40
3166	Model Stadium 66A.....				2,500	7.50

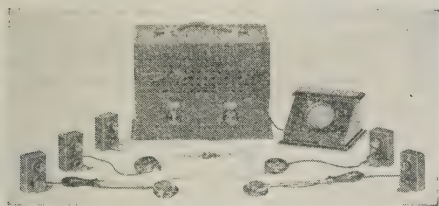
VICTOR

3167	Models R32, 45, 75.....				2,950	5.80
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"D-N LIST"

HEARING AIDS — PRE-AMPLIFIERS

TRIMM GROUP HEARING AID



The demand for group hearing aid equipment is ever increasing—for churches, theatres, etc. This Trimm Complete is scientifically engineered and designed for this work. Installations are simple and complete instructions are furnished with each unit. The illustration shows all of the equipment—an amplifier, crystal microphone and stand, six Trimm F101 headphones with plugs, six outlet boxes with phone jacks and volume controls. Trimm Model A140 group hearing aid—complete as described. List.....\$240.00
Write for circular describing this unit in detail.

TRIMM FEATHERWEIGHT PHONES

Single Unit

Absolutely the finest phone for theatres, churches, hospitals and individual hearing aids. Adjustable lightweight spring steel headband. Can not be excelled for service or comfort.
No. F101—List\$7.50



TRIMM Lorgnette Handle Single Unit Earphone



No. F102—14-in. handle (when extended). List.....\$8.10
No. F102—22-in. handle (when extended). List.....8.70

TRIMM OSCILLATOR

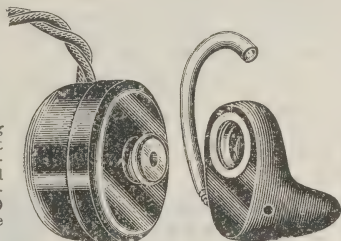
Bone conduction unit—is of an exclusive design. Light, compact, having an extra lightweight headband. Furnished from 1 to 2,000 ohms D. C. resistance. (State resistance desired.)
No. M207—List\$20.40



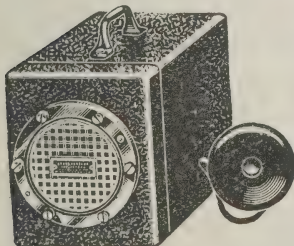
TRIMM MINIATURE EARPHONE

For the individual hearing aid. Magnet of 36% cobalt steel. Exclusive design, assuring clearness, volume and flexibility. Furnished in resistances from 1 to 2,000 ohms D. C. (State resistance desired.)

No. M-200—List\$12.00
No. MA-200—Adapter or earpiece for holding the miniature earphone in the ear. Right or left. List.....\$2.40

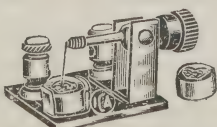


UNIVERSAL HEARING AID DEVICES



MODEL HA1—Two-stage amplifier using 230 tubes 11 in. by 5 1/2 in. by 7 1/4 in., weight without batteries 5 1/4 lbs., with batteries weighs 16 1/2 lbs. Up to 10 single earphones can be connected to HA1 at one time, for churches, schools, etc. Utmost in quality and volume. Large size batteries permit consistent long time use, minimum of battery upkeep expense. Model No. HA1 complete with spec. Univ. microphone and featherweight earphone with head band, but without tubes and batteries.....\$57.60

MODEL HA2—Same as above except smaller, 9x4 1/2 in. Weight without batteries is 4 1/2 lbs. and with batteries installed 7 lbs. Model HA2 complete with special Univ. microphone and featherweight earphone with head band, but without tubes or batteries.....\$52.80



CRYSTAL DETECTOR UNIT WITH CRYSTAL

No. 2\$0.80
Crystals only. Each......30

AUDIO DEVELOPMENT CO. PRE-AMPLIFIERS

A highly engineered and developed line of pre-amplifiers for use with the new low-gain microphones. We recommend these units to be the best of their types that we have ever tested.

MULTI-PURPOSE AMPLIFIER

Designed for use either as a pre-amplifier or a broadcast station remote pick-up amplifier. With its input impedances of 50 ohms, 200 ohms and 5 megohms, almost any type of microphone may be used with it. The transformers are sealed in special cast iron cases eliminating any hum pick-up or moisture effect.

Technical Information

Power Supply—110 volts, 60 cycles.

Power Consumption—10 watts.

Gain—70 db.

Tubes—2 75-type tubes, 1 84-type tube.

Input Impedances—50 ohms, 200 ohms and 5 megohms. Low impedance inputs on 4 prong socket. High impedance on jack.

Output Impedance—200 ohms standard. 500 ohms optional, small additional charge for other impedances. Output connections on screw terminals.

Maximum Output—Plus 6 db.

Frequency Characteristic—less than 2 db. variation from 40 to 10,000 cycles.

Dimensions—15 inches by 7 inches by 4 inches.

Model A13A—Less tubes. List.....\$52.20

CRYSTAL MIKE PRE-AMPLIFIER

A single unit pre-amplifier completely A.C. operated. Special transformers and very complete shielding including cast cases on all coils make this unit very compact and free from hum. Size 9 1/2 x 6 x 3 1/2 inches. Ideal for replacing carbon microphone with a crystal microphone on the older type P. A. systems.

Technical Information

Gain—35 db.

Frequency response—not over 2db. variation from 30 to 10,000 cycles.

Input impedance—5 megohms.

Tubes required—1-75, 1-84.

Input connection—jacks for one or two crystal microphones.

Output connection—screw terminals.

Output impedance—200 ohms.

Other impedances will be supplied on request.

Power supply 110 volts, 60 cycles.

Power consumption—10 watts.

No. A11A—Less tubes. List\$35.80

No Competition from Us!

We Are 100% Wholesale!

We are very anxious to keep our mailing list clear of persons that are not entitled to receive wholesale catalogs. We must depend on you fellows, to a large extent, to help us accomplish this. If you know of anyone that is receiving our catalog who should not, please inform us. We will be glad to send you our list for your town to be checked over.

Plan on attending the SERVICEMEN'S CONVENTION

to be held in Minneapolis, Minn.,
this Spring.

Watch for announcement

A free gift to all servicemen who visit our Minneapolis store during the convention.

SEE PHONE JACKS
ON PAGE 61

SEE OTHER EARPHONES
ON PAGE 115

RADIO DIALS-CHOKES

CROWE MICROMASTER DIAL

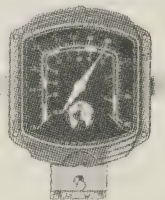


Finest receiver dial made. Has adjustable planetary drive which may be loosened or tightened to provide exactly the proper condenser drag. Auxiliary pointer and positive gear drive affords exact repeat indication of wave length. Stations closely crowded may be accurately logged. Two-speed drive, slow speed 45 to 1, fast speed 9 to 1 in 360 degrees. Bronze escutcheon with "Croglas" non-inflammable convex crystal eliminates breakage. I. D. of escutcheon 3 3/4 in. Translucent pyralin scale with universal 4 channels graduated in kilocycles and megacycles. Pointers and knobs move in same direction. For 3/8-inch condenser shaft. Furnished complete with double knob and dual pilot lightbracket.

No. 301L—Condenser closes left. **\$6.20**
No. 301R—Condenser closes right. Each.....

CROWE AIRPLANE DIAL

I. D. of escutcheon 3 3/4 inches. Wedge drive with geared connection to the pointer. Ratio 7 to 1 in 180°. Pointer travels 268°. Bronze escutcheon. Ivory translucent dial, one pilot bracket included. An all-wave dial—4 channels.
No. 159L—Condenser closes left. **\$3.80**
No. 159R—Cond. closes right.



CROWE AIRPLANE DIAL

2 7/8 inches across face inside escutcheon. Friction disc drive. Ratio 7 1/2 to 1 in 180°. Includes pilot lite sockets. Bronze escutcheon. Black translucent dial. Convex glass. Two channels. An attractive dial.
No. 166L—Condenser closes left. **\$3.00**
No. 166R—Condenser closes right. Each.....



CROWE AIRPLANE DIAL

Friction disc drive. Ratio 9 to 1 in 180°. I. D. of escutcheon 2 1/2 in. Bronze escutcheon. Ivory translucent dial with four channel markings. Convex "Croglas" dial. Includes pilot lite sockets.
No. 183L—Condenser closes left. **\$2.40**
No. 183R—Condenser closes right. Each.....



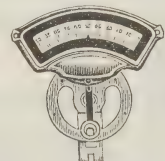
AIRPLANE DIAL

2 1/2-inch black with white graduations Pyralin dial. Bronze escutcheon. Convex glass. Ratio 1 1/2 to 1, 180°. Friction drive.
No. 125—Right or left close.....**\$2.40**



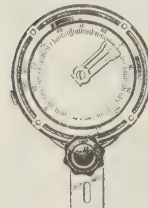
FULL VISION DIAL

3 3/4-inch tan with black graduations Pyralin dial. Bronze escutcheon. Pointer travels 60°. A good quality low priced dial.
No. 48—Right or left close.....**\$1.90**



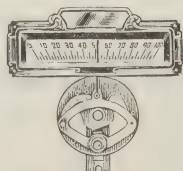
CROWE INSTRUMENT DIAL

For oscillators and the like. Ratio 14 1/2 to 1 in 360 degrees condenser travel. Pointer travels 268 degrees. Die stamped open vision pointer. Silver plated etched metal scale and pointer. Wedge drive mechanism. Mounting brackets formed to permit fastening to a metal panel. Hub diameter 1/4 in. Scale diameter 2-13/16 in. Depth from rear of panel 7/8 in. Chrome plated escutcheon and black bakelite knob.
No. 371A—0-100. **\$5.40**
No. 371B—100-0. Each.....

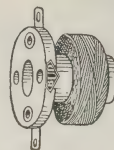


FULL VISION DIAL

Straight scale 4 1/2 inches long. Ratio 6 to 1 for 180° condenser rotation. Pointer travels 70°. Positive friction drive.
No. 133—Right or left close.....**\$2.60**



SEE OTHER DIALS ON PAGES 97-108.
SEE CAR RADIO DIALS ON PAGE 35.
SEE KNOBS ON PAGE 31.



R. F. CHOKES

Lattice wound of green silk and enamel covered wire on genuine Isotex forms. These chokes have very low D. C. resistance and low distributed capacity.

No. B1212—2.5 M.H.....	\$0.48	No. B1217—16 M.H.....	\$0.66
No. B1213—3.4 M.H.....	.48	No. B1218—30 M.H.....	.66
No. B1214—5.5 M.H.....	.48	No. B1219—60 M.H.....	.72
No. B1215—8 M.H.....	.54	No. B1220—80 M.H.....	.78
No. B1216—10 M.H.....	.54		

LINE FILTER CHOKES

Eliminates high frequency pick-up from power lines. Very fine for amateur transmitters—reduces BCL complaints.

FINE FOR TRANSMITTERS

No. M7825—Up to 2 amps.....	\$1.20
No. M7826—Up to 5 amps.....	3.00
No. M7827—Up to 10 amps.....	3.90
No. M7828—Up to 20 amps.....	4.80



RECTIFIER PLATE CHOKE

R. F. filter choke for use in rectifier plate circuit. Consists of 2 R. F. chokes mounted in aluminum shield can 1 1/2 inches diameter by 2 inches high. Necessary for use with mercury vapor rectifier tubes. Max. current—100 M. A.
No. M80-F.....**\$0.90**

SEE NATIONAL CHOKES ON PAGES 95-97
SEE HAMMARLUND CHOKES ON PAGE 102

I. F. TRANSFORMERS

Iron Core Types

NEW ALADDIN UNITS

No. C-101M—For metal tubes—456Kc.—gain 52 between 6A8 and 6K7—fine for auto radios. List.....**\$3.00**
No. C-200M—For metal tubes—456Kc.—gain 58 1/2 between 6K7 and .5 meg. 6H6 diode load—fine for auto radios. List.....**\$3.00**
The C type units are in the new small size shield can 1 1/2 inch square and 2 1/2 inches high.

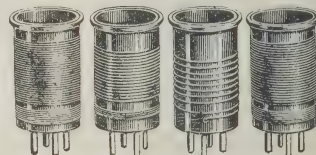
MEISSNER-FERROCART

Iron Core I. F. Units

No. M5728—175Kc.—Input	\$2.40
No. M5730—175Kc.—Output	2.40
No. M5740—456Kc.—Input	2.40
No. M5742—456Kc.—Output	2.40

SEE OTHER R. F. AND I. F. TRANSFORMERS ON PAGES 71-72
SEE RECEIVER COIL KITS ON PAGES 69-70-105

OUR SALES LEADER! VALUE-PLUS SHORT-WAVE COIL KIT



Wound on smooth black bakelite coil forms 1 1/4 inches diameter and 2 1/2 inches high with special colored rim handle on top making it easy to pull from socket. Tunes 16 to 200 meters using a 140 mmfd. variable condenser. Comes complete with diagrams.
No. G2030—Set of 4 coils. List.....**\$1.48**
No. G2065—Set of 2 coils to cover 190 to 550 meters..... **1.20**
No. G2064—1 coil to cover 9.5 to 21 meters..... **.60**

SEE OTHER COIL KITS ON PAGES 101-105-107

DO YOU KNOW THAT:

The Lew Bonn Co. stock of radio parts is nearly ten times larger than any other stock of parts in Minnesota, Wisconsin, Iowa, Nebraska, North and South Dakota?
The Lew Bonn Co. has over 800 front feet of bins filled with brand new radio parts. Each bin is 7 1/2 feet high and has from six to twelve shelves.
The Lew Bonn Co. is one of the fastest growing radio parts jobbers in the country and has a reputation for square dealing that is the envy of our competitors.

THESE FACTS ARE REAL—NOT IDLE CLAIMS. GET YOUR SHARE OF THAT "DAYS" QUICKER SERVICE."

"D-N LIST"

New Type Switches



Jacks - Jack Switches Tip Jacks - Rectifiers

YAXLEY CIRCUIT SELECTOR, TAP AND SHORT-WAVE SWITCHES

No. 1200 and 1300 Series Single and Multiple Gangs, providing single and various circuit combinations on each section.

SINGLE GANG SWITCHES

Short- ing Type	Non Short- ing Type	List Price
Y1216	Y1316	Single Circuit 1 to 6 points each circuit... \$1.20
Y1211	Y1311	Single Circuit 1 to 11 points each circuit... 1.40
Y1215	Y1315	Two Circuit 1 to 5 points each circuit... 1.50
Y1213	Y1313	Three Circuit 1 to 3 points each circuit... 1.60
Y1212	Y1312	Four Circuit 1 to 2 points each circuit... 1.70

TWO GANG SWITCHES

Y1226	Y1326	Two Circuit 1 to 6 points each circuit... \$1.90
Y1221	Y1321	Two Circuit 1 to 11 points each circuit... 2.10
Y1225	Y1325	Four Circuit 1 to 5 points each circuit... 2.40
Y1223	Y1323	Six Circuit 1 to 3 points each circuit... 2.50
Y1222	Y1322	Eight Circuit 1 to 2 points each circuit... 2.70

THREE GANG SWITCHES

Y1236	Y1336	Three Circuit 1 to 6 points each circuit... \$2.60
Y1231	Y1331	Three Circuit 1 to 11 points each circuit... 2.80
Y1235	Y1335	Six Circuit 1 to 5 points each circuit... 3.00

FOUR GANG SWITCHES

Y1246	Y1346	Four Circuit 1 to 6 points each circuit... \$3.30
Y1241	Y1341	Four Circuit 1 to 11 points each circuit... 3.60
Y1245	Y1345	Eight Circuit 1 to 5 points each circuit... 4.20

Instructions in each box.

YAXLEY SINGLE SECTION SWITCHES

Giving combinations from single pole, single throw to six pole, double throw.

No. Y2742—Single Section Switch, 1½-inch diameter, gives the following combinations:

Single pole, single throw.	Three pole, single throw.
Single pole, double throw.	Three pole, double throw.
Two pole, single throw.	Four pole, single throw.
Two pole, double throw.	Four pole, double throw.

List price, each \$0.90

No. Y2762—Single Section Switch, 2-inch diameter, provides all of the combinations available in the 2740 type Switch and also provides for:

Five pole, single throw.	Six pole, single throw.
Five pole, double throw.	Six pole, double throw.

List price, each \$1.20

Instructions in each box.

YAXLEY CIRCUIT OPENING SWITCH

This new switch will "open" any one of the twelve "lines" for the insertion of a current reading meter such as a milliammeter and maintain a "through" circuit on the other eleven lines. Used in tube checkers, analyzers, etc. 1½ ins. long x 2½ ins. wide; ¾-in. bushing and ¼ x ¾-in. shaft.
No. Y1400—Complete with knob and dial and instructions. \$5.40

SPECIAL 15-POINT TAP SWITCH

Shorting type—single gang only, includes dial plate.

No. Y150 \$1.80

JACKS

Small Size Single Circuit Jacks—No. B233.....	\$0.30
Small Size Open Circuit Jacks—No. B232.....	.34

Size ¾ inch deep.

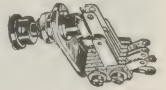
RECTIFIERS

Type 4A1B—Replacing XB4. Set of 3.....	\$4.80
Type 12C1—Replacing U12-X12. Each.....	4.80
Type 12A1BY—Replacing UP8-XP12. Each.....	4.80
Type 16C3—Replacing X16. Each.....	6.60
Type 16C3B—Replacing XB16. Each.....	8.40

Write for special Mallory Rectifier Catalog giving complete information if interested.

PUSH BUTTON SWITCHES

Widely used in tube checkers, analyzers.



No. Y2001—S. P. make contact.....	\$1.08
No. Y2002—S. P. break contact.....	1.08
No. Y2003—S. P. double throw.....	1.20
No. Y2004—2 Pole—Make 2 contacts.....	1.44
No. Y2005—2 Pole—Break 2 contacts.....	1.44
No. Y2006—2 Pole—Double throw.....	1.80
No. Y2007—Make 2, break 1.....	1.56
No. Y2008—Double Pole—Make before break.....	1.98

These switches can be furnished locking or non-locking. Specify "L" for locking and "NL" for non-locking.

JUNIOR JACK SWITCHES

We stock all types but will show only the good selling types.

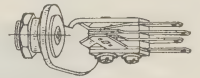
No. Y760—Double Pole, Double Throw.....	\$1.50
No. Y733—Three Pole, Single Throw.....	1.50
No. Y740—Double Pole, Single Throw.....	1.14

With center "off" position

No. Y732—Single Pole, Double Throw.....	1.00
No. Y762—Double Pole, Double Throw.....	1.44
No. Y763—Three Pole, Double Throw.....	1.98
No. Y744—Four Pole, Double Throw.....	1.90

JUNIOR JACKS

Mount in 7/16 in. panel hole and extend 1¼ in. back of panel.



No. Y701—Open Circuit.....	\$0.48
No. Y702—Circuit Closing.....	.66
No. Y702A—Two Circuit.....	.66
No. Y702B—Three Circuit Microphone.....	.66
No. Y703—Single Circuit Filament Control.....	.80
No. Y703A—Circuit Reversing.....	.80
No. Y703C—Double Circuit.....	.80
No. Y704—Interstage.....	.90
No. Y704A—Two Circuit Filament Control.....	.90
No. Y705—Two Circuit Filament Lighting.....	1.00
No. Y706—Interstage Filament Control.....	1.10

YAXLEY INSULATED TIP JACKS

Red, Black, Yellow, Green, Blue



No. Y422—Pair—red and black.....	\$0.30
Each.....	.18
No. Y15—Tip Plugs for above jacks—Long.....	.18

NO. 407 INSULATED TIP JACKS

Round Bakelite Head



No. Y407—One pair—red and black.....	\$0.42
No. Y407—Each—green, red and black.....	.24
No. Y415—Tip Plug for Y407 type jacks. Each.....	.10

METAL TIP JACKS

Round and Hex. Heads

No. Y416—Round 5/16-inch hole—use washers No. No. 204-214 on metal panel.....	\$0.12
No. Y417—Hexagon, ¼-inch hole—use washers No. 205-213 on metal panels.....	.12

INSULATING WASHERS

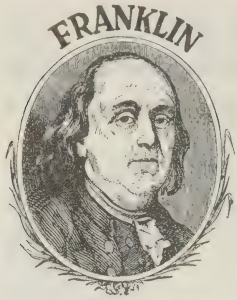
No. Y203—Extruded, ¾-in. O. D. x ¾-in. I. D.; 10 for.....	\$0.30
No. Y204—Extruded, ½-in. O. D. x 5/16-in. I. D.; 10 for.....	.30
No. Y205—Extruded, ½-in. O. D. x ¼-in. I. D.; 10 for.....	.30
No. Y212—Flat, ¾-in. O. D. x ¾-in. I. D.; 10 for.....	.18
No. Y213—Flat, ½-in. O. D. x ¼-in. I. D.; 10 for.....	.18

ETCHED DIAL PLATES

Match Yaxley Gang Switches, Y370 Series

Any markings desired from "1 to 2" up to "1 to 12." Each..... \$0.18
Can also be furnished marked "off 1 to 3" up to "off 1 to 10." Ea. \$0.18

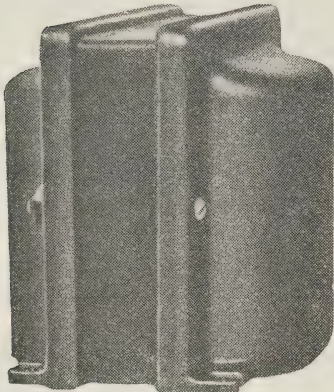




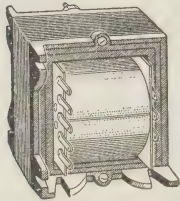
FRANKLIN

Made in Minneapolis

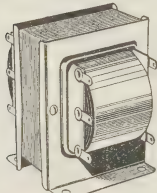
Replacement and General Purpose Power Transformers



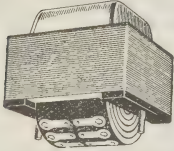
Type A—Case



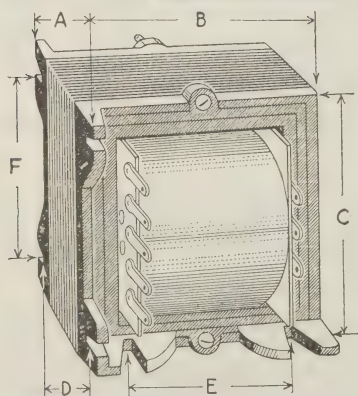
Type D—Uncased



Type C—Semi-cased



Type B—Half Case—Horizontal



NO. 101

350-350 Volts at.....120 M.A.
5 Volts at.....2 A.
2½ Volts at.....3 A.C.T.
2½ Volts at.....12 A.C.T.
For any sets using up to 7, 224's or 227's—2, 245's or 247's and a 280.

Uncased.

Type D **\$7.00**

Cased.

Type A **7.90**

NO. 104

400-400 Volts at.....100 M.A.
5 Volts at.....2 A.
2½ Volts at.....3 A.C.T.
2½ Volts at.....12 A.C.T.
For sets needing more secondary voltage than a 101.

Uncased.

Type D **\$7.90**

Cased.

Type A **8.60**

NO. 105

For Spartons

300-300 Volts at.....100 M.A.
5 Volts at.....3 A.C.T.
5 Volts at.....2 A.C.T.
3 Volts at.....10 A.C.T.
This transformer will supply correct voltages for the Sparton 930-931, etc.

Uncased.

Type D **\$7.50**

NO. 250

575-575 Volts at.....100 M.A.
7½ Volts at.....3 A.C.T.
7½ Volts at.....3 A.
2½ Volts at.....12 A.C.T.
For sets using up to 7 or 8, 224's or 227's—2, 250's or 210's and 2, 281's.

Uncased.

Type D **\$8.20**

Cased.

Type A **9.00**

NO. 182

Class B

350-350 Volts at.....200 M.A.
2½ Volts at.....7 A.
2½ Volts at.....3 A.
2½ Volts at.....3 A.

For sets using up to 7, 57's or 58's—2, 46's and an 82. Can be furnished with a 5-volt winding for an 83 if desired.

Cased.

Type A **\$9.90**

NO. 282

Class B

450-450 Volts at.....200 M.A.
2½ Volts at.....9 A.
2½ Volts at.....3 A.
2½ Volts at.....3 A.

For sets using up to 8, 58's or 57's—2, 46's and an 82. Can be furnished with a 5-volt winding for an 83 if desired.

Cased.

Type A **\$11.00**

NO. 290

375-375 Volts at.....120 M.A.
5 Volts at.....3 Amp.
2½ Volts at.....10 Amp. C.T.
6.3 Volts at.....3 Amp. C.T.

For sets using both regular and 6.3 V. tubes.

Cased.

Type A **\$10.50**

NO. 291

425-425 Volts at.....100 M.A.
5 Volts at.....3 Amp.
2½ Volts at.....2 Amp. C.T.
2½ Volts at.....7 Amp. C.T.

For sets using new tubes such as 53-55-56-57-58, etc.

Cased.

Type A **\$10.80**

Trans. No.	W in.	H in.	L in.	Wt. lbs.
101	3	4½	3¾	8
104	4½	4½	3¾	9
105	3	4½	3¾	8
250	4½	4½	3¾	9
171	3¾	4	3¾	5½
171-A	3¾	4	3¾	5½
171-B	3¾	4	3¾	5½
501	3	3¾	3	5
502	3	3¾	3	5
515	2¼	3¾	3	3
516	2¼	3¾	3	3
508	2¾	2	3¾	3
509	2¾	2	3¾	3
305	3¾	4	3¾	5½

NOTE: Transformers No. 101-104-250 can be furnished with 2½ volt winding for the new 282 Rectifier Tube.

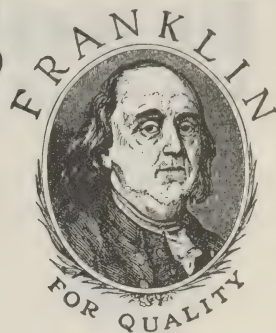
All of the above transformers for 110 volts 60 cycle.

"D-N LIST"

TRANSFORMERS

Sold All Over the World

Replacement and General Purpose Power Transformers



NO. 171

285-285 Volts at.....60 M.A.
5 Volts at.....2 A.
5 Volts at.....½ A.C.T.
2½ Volts at.....12 A.C.T.

For sets using up to 7 or 8, 224's
or 227's—2, 171-A's and a 280.

Semi-cased.

Type C **\$5.60**

NO. 171-A

300-300 Volts at.....60 M.A.
5 Volts at.....2 A.
5 Volts at.....½ A.C.T.
1½ Volts at.....9 A.
2½ Volts at.....2 A.C.T.

For sets using up to 5 or 6, 226's
—1, 227—2, 171A's and a 280.

Semi-cased.

Type C **\$5.60**

NO. 171-B

300-300 Volts at.....60 M.A.
1½ Volts at.....10 A.C.T.
2½ Volts at.....3 A.
2½ Volts at.....3 A.C.T.
5 Volts at.....2 A.

For sets using up to 5 or 6, 226's
—2, 227's—2, 245's and a 280.

Semi-cased.

Type C **\$6.00**

NO. 305

Made in Two Types

No. 305-V—Vertical upright
mounting.

No. 305-H—Horizontal sub panel
connections.

350-350 Volts at.....85 M.A.
5 Volts at.....2 A.
2½ Volts at.....3 A.
2½ Volts at.....8 A.C.T.

For any sets using up to 4, 224's
or 227's—2, 245's or 247's and a
280.

No. 305-V—Semi-
cased. Type C.... **\$6.10**

No. 305-H—Half-
cased. Type D.... **6.10**

*Franklin can manufacture
any special transformer you
may need at lowest prices.
Just send in specifications
and we will quote.*

NO. 501

325-325 Volts at.....60 M.A.
5 Volts at.....2 A.
2½ Volts at.....2 A.
2½ Volts at.....9 A.C.T.

For sets using up to 5, 224's or
227's—1, 245 or 247 and a 280.

Semi-cased.

Type C **\$4.60**

NO. 502

325-325 Volts at.....60 M.A.
5 Volts at.....2 A.
2½ Volts at.....9 A.C.T.

For sets using 4, 224's or 227's—
1, 245 or 247 and a 280.

Semi-cased.

Type C **\$3.50**

NO. 507

325-325 Volts at.....60 M.A.
5 Volts at.....3 A.
6.3 Volts at.....4 A.

For sets using up to 7, 36's, 37's,
38's, 39's, 77's, 78's, etc. and 1,
80.

Half-cased.

Type B **\$3.50**

NO. 509

330-330 Volts at.....60 M.A.
2½ Volts at.....9 A.C.T.
5 Volts at.....2 A.

For sets using 4, 224's or 227's—
1, 245 or 247 and a 280.

Half-cased.

Type B **\$3.50**

NO. 510

275-275 Volts at.....40 M.A.
2½ Volts at.....5 A.C.T.
5 Volts at.....2 A.

For midget receivers using 2, 24's,
27's or 35's—1, 245 or 247 and
1, 280.

Half-cased.

Type B **\$2.70**

See Pages 116-117-118 in
amateur section for transmit-
ting type FRANKLIN TRANS-
FORMERS.

See Pages 116-117-118 for
other FRANKLIN TRANS-
FORMERS

“D-N LIST”

FILAMENT TRANS- FORMERS

NO. 511

For tube testers 1½-2½-3-5-6.3-
7½-12-15-25 and 30 volts. 3¾
in. high, 3 in. wide, 3 in. deep.

Type

C **\$3.00**

NO. 515

2½ Volts at.....12 A.C.T.
5 Volts at.....3 A.C.T.

Filament voltages for up to 8,
224's or 12, 58's and 1, 83.

Type

C **\$2.40**

NO. 516

2½ Volts at.....12 A.C.T.
2½ Volts at.....3 A.C.T.
5 Volts at.....3 A.

Type

C **\$2.80**

NO. 517

6.3 Volts at.....6 A.
5 Volts at.....3 A.C.T.

Type

C **\$2.40**

NO. 518

7½ Volts at.....3 A.C.T.
5 Volts at.....3 A.C.T.

Type

C **\$2.40**

NO. 519

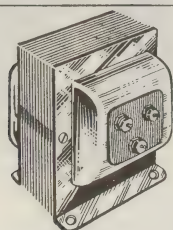
2½ Volts at.....5 A.

Same size as regular
audio transformer.. **\$1.90**

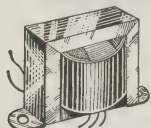
*Franklin Transformers are
guaranteed against defective
materials and workmanship
for 1 year.*

Franklin Transformers

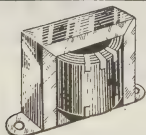
AUDIO...CLASS B...MICROPHONE...MATCHING



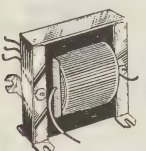
TYPE G
2 3/4 x 2 3/4 x 3 1/4
in.



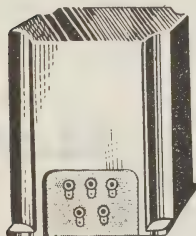
TYPE F
2 3/8 x 1 3/4 x 2 in.



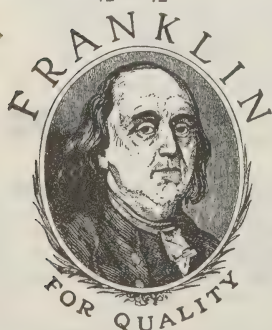
No. 807
2 3/8 x 1 3/4 x 2 in.



TYPE E
2 1/2 x 2 1/4 x 1 5/8
in.



TYPE M
3 1/4 x 3 1/2 x 4 3/8 in.
TYPE N
2 x 2 1/2 x 3 1/2 in.



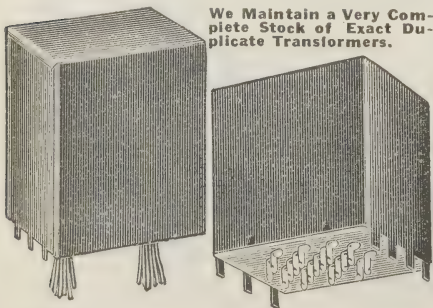
USE	Type No.	Illus.	Secondary into:	List Price
INTERSTAGE COUPLING				
Primary from plate of small triode or pentode such as: 2B7, 6B7, 6C5, 201A, 112A, 226, 30, 37, 55, 56, 75, 85, 199, 864. Overall Ratio 3:1	1100	E	Single Grid	\$2.20
	1102	F		1.96
	1101	E	Two Grids	2.20
	1103 450	F G		Ditto but 4 Sec. terminals	1.96 6.75
Same tubes as above but two in push-pull.	1104 451	F G	Two Grids Ditto but 4 Sec. terminals.	1.96 7.70
CLASS B INPUT				
Tubes on Pri: 1-46	560	G	Tubes on Sec.: 2-46	4.50
		F		2.90
1-30	534C	F	1-19 Twin.	1.60
89 Triode.	564	G F G	1-79 Twin.	4.50 2.40
		F	2-89.	4.50 2.90
	579		G F	1-53, 6A6, 6N7.	4.50 2.90
		MICROPHONE AND MATCHING—Primary		
Single Button 200 Ohm Microphone.	520	G	Grid.	4.70
	520B	F		2.20
Double Button 400 Ohm Center Tapped.	521 521B	G F	500 Ohm Line.	6.90 2.60
	522 522B	G F		4.50 2.20
	577 577B	G F	200 Ohm Line.	4.50 2.40
	400 Ohms, C. T.	523	G	400 Ohm Line.
523B		F	2.60	
500 Ohms.	524 524B	G F	500 Ohm Line.	6.00 2.60
	526 525B 527	G F G	4-8-15 Ohms 18 W. Grid. 2500-5000-10000.	7.20 3.20 6.60
	578 578B	G F	200 Ohm Line (or 200 to 500).	4.50 2.40
	RIBBON MICROPHONE			
CRYSTAL MICROPHONE	528B	F	Grid.	2.60
	529B	F	500 Ohm Line.	2.60
	530B	F	Grid.	2.30
	531B	F	500 Ohm Line.	2.30
OUTPUTS				
Class B 89's.	569	4-8-15 Ohms.	\$2.90	\$4.50
	568	4000 Ohms.	2.90	4.50
Class B 79 (Twin).	566	4-8-15 Ohms.	2.70	4.50
	565	4000 Ohms.	2.70	4.50
2A3's (or 4-45's).	576	4-8-15 Ohms.	3.10	5.10
	575	500 Ohms.	3.10	5.10
	574	4000 Ohms.	3.10	5.10
1-45.	801	8-15 Ohms.	1.90	....
2-P. P. 45's.	802	8-15 Ohms.	1.90	....
1 or 2 45's, 50's.	454	10-20-40 Ohms.	....	6.40
1-47, 2A5, 42, 59, 6A4, 33, 41, 46, 89, 31, etc.	804	8-15 Ohms.	1.90	....
Ditto but Single or P. P. Or any other tubes up to 35 m. a. plate current and recommended load 6000 to 8000 Ohms.	455 805	10-20-40 Ohms. 400 Ohms.	 2.40	6.00
	806	2000 Ohms.	2.40	....
	808	2-4-8-15 Ohms. 500-5000 Ohms.	3.00	....
1 or 2-45, 31, 33, 47, 12A, 71A, 89, etc.	807	1-3-5-8-15-2000.	2.30	....
Class B 46's or 59's.	562	4-8-15 Ohms.	2.90	4.80
	563	500 Ohms.	2.90	4.80
	561	5000 Ohms.	2.90	4.80
Class B 53, 6A6, 6N7.	573	4-8-15 Ohms.	2.30	4.60
	572	500 Ohms.	2.30	4.60
	571	4000 Ohms.	2.40	4.60
Class B or P. P. Class A 46's, 2A3's, 59's or any other tubes requiring approx. plate to plate load of 5800 Ohms. Output 25 watts "N" case.	590	4-8-15-500-5000 Ohms.	....	5.30
Class B or P. P. Class A 2B6's, 53, 6A6, 79, 19, 38's, 89's, etc., or any other tube requiring approx. plate to plate load of 10,000 Ohms. Output 25 watts "N" case.	591	4-8-15-500-5000 Ohms.	....	5.30

REPLACEMENT EXACT DUPLICATE TRANSFORMERS

Made by Standard Transformer Co.

Make	Model	No.	Price
All. Am. Lyric.....	30	P1038	\$7.30
Apex.....	32	P1291	6.10
AK.....	37-38	P 716	6.40
AK—Late.....	55-55C	P 913	7.70
AK—Early.....	55-55C	P 918	7.50
AK.....	60-60C	P1066	7.20
AK—(Plate).....	66	P1213	7.50
AK.....	H 1, 2; L 1, 2	P1068	7.00
AK.....	80-83	P1088	7.00
AK.....	82-85	P1084	7.00
AK—Early and Late.....	84	P1086	7.00
AK.....	87, 89, 89P	P1089	7.60
Bosch.....	29-825	P 859	8.60
Brunswick 14, 21, 31, 32, 614,			
521, 581, 582	P1112	8.20	
Clarion.....	40	P1499	5.40
Clarion.....	60	P1438	7.40
Clarion.....	80	P1928	5.10
Eveready.....	30	P1030	7.00
Eveready.....	40	P 956	5.90
Eveready.....	50	P 901	5.90
Gloritone.....	8	P1479	6.50
Gloritone.....	10	P1016	7.20
Gloritone.....	26	P1405	4.70
Gloritone.....	26P	P1358	4.70
G. M.....	S-9-A	1271	5.20
G. M.—Little General.....	110	P1485	4.60
Grebe.....	HS4	P1476	6.00
Kolster.....	1543	P1192	8.00
Majestic—Unmounted 15-15B	P 906	4.20	
Majestic.....	21, 22, 23	P 954	5.80
Majestic.....	130, 131, 132, 233	P1102	8.70
Majestic.....	25 and 25B	P1168	6.60
Majestic.....	50	P 905	6.50
Majestic—(Plate).....	70-7P6	P 790	5.90
Majestic—(Fil.).....	70-7P6	P 798	5.60
Majestic.....	90B-100B	P 939	5.60
Majestic—(Fil.).....	180-8P6	P 805	6.20
Majestic—(Plate).....	180-8P6	P 789	8.90
Philco.....	20-220	P 762	7.00
Philco.....	65	P 711	6.50
Philco.....	76-77	P 785	7.20
Philco.....	86	P 786	6.40
Philco.....	87	P 783	7.20
Philco.....	95, 96, 296	P 787	8.80
Philco.....	111-211	P 788	8.50
Philco.....	112-212 (245's)	P 788	8.70
Philco.....	112-212 (247's)	P 882	8.00
Philco.....	511	P 784	6.80
Philco.....	70, 270, 370, 470, 570	P1119	6.40
Philco.....	50, 51, 52, 551	P1460	5.00
Philco.....	90-490 (1-247)	P1468	8.00
Philco.....	90 (2-245's)	P1469	8.10
RCA.....	17, 18, 33, 50, 51	P 791	6.50
RCA.....	42-48	P 927	7.90
RCA.....	60-2	P 715	6.50
RCA.....	64-67	P 827	21.60
RCA.....	66	P 883	7.80
RCA.....	Superette	P1481	5.80
RCA.....	R4-R6	P1487	5.80
RCA.....	R7-R9	P1481	5.80
RCA.....	R7A	P1482	6.00
RCA.....	R8-R10-R12-RE19	P1483	6.00
RCA.....	R11-R21-RE18	P1474	6.70
RCA Victor.....	R35-R39-RE57	P 718	7.60
Sparton.....	89A	P 921	6.50
Sparton.....	301	P1372	9.80
Sparton.....	410-420	P1196	7.70
Sparton.....	589	P 909	7.80
Sparton.....	101-110-111	P1412	9.00
Sparton.....	103-99 DeLux	P1411	8.80
Sparton.....	931	P 864	7.70
Stewart-Warner.....	950	P1470	5.90
Sentinel.....	104	P1253	8.20
Sentinel.....	108	P 420	5.50
Temple.....	8-60-8-80	P 219	6.30
Westinghouse.....	WR4	P 927	7.90
Westinghouse.....	WR 5-6-7	P 713	7.90
Zenith.....	10-11-12	P 851	8.00

We Maintain a Very Complete Stock of Exact Duplicate Transformers.



FREED EXACT DUPLICATE POWER TRANSFORMERS

Model	Mfr.	Cat. No.	Price	Model	Mfr.	Cat. No.	Price
ALL-AMERICAN MOHAWK				MONTGOMERY WARD			
90-93-94-95		2008	7.50	Serenader 10,000			
ATWATER-KENT				Dictator 500....	3002		\$6.45
36-37-38		2056	\$3.90	3035-3037-3065-3067			
60-60C Early Model 2062			7.15		3003		6.45
60-60C Late Model 2063			7.15	PHILCO			
70-72-H1-H2-L1-L2 2066			7.50	20-220	4221		5.90
BOSCH				65	4224		5.90
28		2204	5.90	70-270-370-470-570	4225		5.90
48		2208	6.70	76-77	4229		5.90
58		2210	6.70	82-86	4230		5.90
BRUNSWICK				87	4226		5.90
14-21-31-81-82-S14-S21-				90 (2—'45s)	4231		5.90
S31-S81-S82	2293		6.70	90 (2—'47s)	4233		5.90
15-22-32-42	2292		6.70	91-121	4234		5.90
CLARION				95-96	4235		5.90
40	T1351		5.90	511-521-531-541-551-			
51-53-55	2327		6.70	561-571	4227		5.90
Junior	2328		6.70	RADIOLA AND R.C.A. VICTOR			
60	2328		6.70	17-18-33-50-51	3032		4.30
61-70	2329		6.70	44-46-47	3033		5.50
80-81-84-85	2330		6.70	60-62	3034		5.50
90-90A-91	2331		6.70	64-67	3035		14.30
220	2332		6.70	42-48	3039		5.90
360	2333		7.50	80-82-86	3040		4.60
460	2334		7.50	R5-R5X	3042		4.60
EDISON				R4-R6-R7-R9-R7A ..	3044		5.50
R4-5, C-4	2447		9.00	R8-R10-R12-R023 ..	3043		6.70
EVEREADY				R50-R55-RE20-RAE59-			
1-2-3	2456		6.70	RAE79	3045		6.70
30-31-32-33-34	2457		6.45	R32-RE45-R52-RE75-			
40-42-43-44	2458		6.45	RE154-RE156 ..	3046		5.80
50-52-53-54	2459		6.45	R14-R15-R17	3048		5.90
FADA				R34-R35-R39-RE57-			
45 (KU)	2479		6.70	RE73	3049		4.60
66 (KY)	2484		6.70	R11-RE18-RE18A-			
60 (KA)	2943		6.70	R21-RAE26	3050		7.50
GREBE				SPARTON			
SK4	2726		6.70	589	3205		7.50
MAJESTIC				930	3208		5.70
70-7P6 Plate.....	2900		4.30	931-591-593	3206		6.70
70-70B-71-72 Plate and				STEWART-WARNER			
Filament Transformer,				950 Series 951-952-953-			
Complete	2901		6.45	961-962-963	3337		6.45
90-91-92-100-101 ..	2902		6.45	SILVERTONE			
90B-100B-93-102-103				(Sears Roebuck & Co.)			
	2905		6.45	1150-1160-1170	4026		5.50
130A-130-131-132-230A-				1152-1174—Late ..			
233	2906		6.45	Model 1160	4027		5.50
50-51-52	2907		6.70	1320-1322-1324	4028		5.50
200 Series 201 Sheffield				U. S. RADIO & TELEVISION CO.			
203 Fairfax 204				(APEX)			
Explorer	2916		6.45	26	4048		5.70
210-211-214-215 ..	2917		6.45	26P	4049		5.70
220-221-223	2918		10.00	8-8A-8B	4054		5.70
290-291-293-294 ..	2919		6.45	10-10C	4046		7.15
300-300A-303-304-				27-27S-27P	4055		5.70
307	2920		7.15	29-31	4050		6.70
310A-311 Early and Late				36-37 Power Transformer			
Models	2921		5.70	and Choke	4051		7.50
310B-314-315 Early and				41	4052		6.70
Late Models.....	2922		5.70	28-46-47-48	4053		6.70
320-324	2923		7.85	99A	4056		6.00
330-331-336-77	2924		6.45	ZENITH			
340-344	2925		7.15	50-52-53-54-55-57-60-61-64-67-522			
360-363	2926		7.15	602-613-622-642-672-			
370-371-373	2927		4.00	70-71-72-73-77-712-			
380-381 Treasure				732-777-80	4141		6.70
Chest	2928		4.30	Zenette 6 Tube Model			
390-393	2929		6.45	2004	4146		6.00
15-15B-150 Series.M814			3.90				

We list only the more popular sets. We can furnish Exact Duplicate Power Transformers, Chokes and Audio Transformers for nearly all sets. Write for information and prices.

"D-N LIST"

KENYON TRANSFORMERS

HIGH FIDELITY AUDIOS CHOKES AND POWER TRANSFORMERS

KENYON SILVER GROUP AUDIO TRANSFORMERS

A low-priced, high quality line of audio transformers. Enclosed in silver-finished cases which act as an electrostatic and electromagnetic shield. Impregnated with a special humidity resisting compound. A lot more quality for a little more money.

LINE TO LINE TRANSFORMERS

Part No.	Case	Purpose	List Price
C100S	2	To couple 50, 125, 200 or 500-ohm line (200 and 500 ohms center tapped) to 50, 200 or 500-ohm line (low level).....	\$ 3.60
C102	1	To couple 1,000 or 4,000-ohm source to 200 or 500-ohm line (low level).....	2.50
C103	3	To couple 15, 8 or 4-ohm voice coil to 500 or 125-ohm line. Level—20 watts	3.80

LINE TO GRID TRANSFORMERS

C201	1	Double button microphone to single grid	2.80
C202	1	High impedance pickup to single grid....	2.80
C203	1	Velocity ribbon microphone to single grid	3.10
C204S	2	To couple any 200 or 500-ohm line (200 and 500 ohms center tapped) to single or push-pull grids.....	3.60

INTERMEDIATE COUPLING TRANSFORMERS

C300	1	Single plate to single grid. Ratio 1:4....	2.60
C303	1	Single plate to push-pull grids.....	2.60
C306S	2	Push-pull plates to push-pull grids.....	4.00

OUTPUT TRANSFORMERS (CLASS A)

C405	3	Push-pull 2A3 plates to 4 and 8-ohm....	3.60
C406	1	Single plate to 200 or 500-ohm line....	2.40
C407S	1	Push-pull plates to 200 or 500-ohm line....	3.10
C408	1	Single plate to magnetic speaker.....	2.20
C409	1	Push-pull plates to magnetic speaker....	2.20
C410	3	P.-pull parallel pentode plates to 8-ohm	3.10
C411	3	P.-pull parallel pentode plates to 500-ohm line.....	3.10

C412	1	Multi-purpose output for single triode or pentode plate; push-pull triode or pentode plates to low impedance secondary tapped from .1 to 20 ohms....	2.40
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C413	1	Multi-purpose output for single triode or pentode plate; push-pull triode or pentode plate to high impedance line for connection to one or more magnetic speakers.....	2.40
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CLASS B AND CLASS AB INPUT TRANSFORMERS

C500	2	To couple 46 or 59 driver plate to Class B 46 or 59 grids.....	3.30
C501	2	To couple 49, 30, or 49 plate to Class B 79, 19, 89 or 49 grids.....	3.30
C503S	1	To couple single 56 to Class AB 45 or Class AB 2A3 grids.....	3.30
C504S	2	To couple push-pull 56 plates to Class AB 45 or 2A3 grids.....	3.60
C506	2	To couple push-pull 45's Class A to push-pull parallel 46 or 59 Class B grids....	3.60

CLASS B AND CLASS AB OUTPUT TRANSFORMERS

C600	3	Push-pull 46 or 59 Class B plates or push-pull 45 AB plates to 4 and 8 ohms.....	3.80
C601	3	Push-pull 46 or 59 Class B plates or push-pull 45 Class AB plates to 500 ohms.....	3.80
C605	3	Push-pull parallel 6A6 plates (2 tubes) to 500 ohms.....	3.80
C606	3	Push-pull 46 or 59 Class B plates, or 45 AB plates, to 4,000 ohms. For best results use C703 as modulation reactor for R. F. plate current up to 100 MA....	3.80

C607	3	Push-pull 53, 6A6, 6B5, 2B6, 49, 19 or 79 Class B plates to 4,000 ohms. For best results use C703 as modulation reactor for R. F. plate current up to 100 MA....	3.80
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C608	3W	To couple push-pull parallel 2A3's, 45's Class AB, 46's or 59's Class B to 8 and 4-ohm voice coil.....	6.00
C609	3W	To couple push-pull parallel 2A3's, 45's Class AB, 46's or 59's Class B to 500-ohm line.....	6.00

C610	Spec.	To couple push-pull parallel 2A3's, 45's Class AB, 46's or 59's Class B to 4,000 or 5,000 ohms. Sec. DC 200 MA. Special Case.....	10.20
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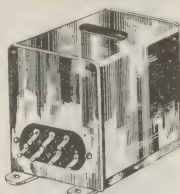
C611	3	To couple push-pull 42's or 2A5's Class AB triode connected to 500-ohm line....	3.80
C612	3	To couple push-pull 42's or 2A5's Class AB triode connected to 4, 8, and 15 ohms.....	3.80

FILTER AND AUDIO REACTORS

C700	3W	Filter choke, 8 henries, 165 MA, resistance 90 ohms D. C.....	3.30
C701	3W	Class B input choke, max. D. C. 165 MA, resistance 92 ohms D. C.....	3.30
C702	1	Filter choke, 20 henries, 65 MA, resistance 200 ohms D. C.....	1.90
C703	2W	Filter choke, 30 henries, 75 MA, resistance 350 ohms D. C.....	2.80
C704	1	Filter choke, 30 henries 25 MA, resistance 800 ohms D. C.....	1.90
C705	3	Center tapped high impedance plate choke, resistance 10,000 ohms D. C....	4.00
C706	1	Detector plate filter choke, max. D. C. 2 MA, resistance 6,000 ohms D. C.....	2.80

KENYON ALL PURPOSE AMPLIFIER COMPONENTS

A medium priced line of very high quality high fidelity audios and chokes. Each encased in a heavy, silver finished, metal case. All units are impregnated in a varnish under high vacuum and sealed in a moisture-proof compound. Universal line primary offers impedances of 50-200-500 ohms and a number of combinations such as 200 and 500-ohm lines used simultaneously; three 200-ohm lines used simultaneously and three 500-ohm lines used simultaneously. For a real honest-to-gosh high quality audio amplifier for P. A. or amateur use, use Kenyon All Purpose Audios.



LINE TO LINE TRANSFORMERS

Part No.	Purpose	Case	List
BLL	Universal Line to Universal Line.....	1C	\$ 7.60
BRL	Ribbon Mike to Universal Line.....	1C	8.30

LINE TO GRID TRANSFORMERS

BLG	Universal Line to Single Grid.....	1C	7.60
BPR	Det. Plate, High Imp.; or 2B Mike (2 separate windings) to Single Grid.....	1C	7.60
BRG	Ribbon Mike to Single Grid.....	1C	8.30
BL2G	Universal Line to P. P. Grids.....	1C	9.00

INTER. COUPLING TRANSFORMERS

B31	Single Plate to Single Grid, 3 to 1.....	1C	6.30
B12	Single Plate to P. P. Grids, 2 to 1 each side.....	1C	6.90
B22	P. P. Plates to P. P. Grids, 1.75 to 1 each side.....	2C	8.30

INPUT TRANSFORMERS—CLASS B

B451	Single 45 or 50 to Class A Prime 45 or 50 Grid.....	2C	8.30
B461	Single 46 or 59 to Class B 46 or 49 Grids.....	2C	8.30
B531	Single 53 to Class B 53 Grids.....	2C	8.30

OUTPUT TRANSFORMERS—CLASS A

BPL	Det. or Audio Plate (56-55 or like) to Universal Line.....	1C	7.60
B2450	P. P. 45 to 500-15-8-4 ohms.....	2C	7.60
BP247	P. P. Pentodes to 500-15-8-4 ohms.....	2C	7.60
B2B60	P. P. 2B6 or 59 to 500-15-8-4 ohms.....	3C	8.40
B2A30	P. P. 2A3 (self-bias) to 4,000, 2,000, 500, 15, 8, 4 ohms.....	3C	9.00
BF2A3	P. P. 2A3 (fixed bias) to 4,000, 2,000, 500, 15, 8, 4 ohms.....	3C	9.00

OUTPUT TRANSFORMERS—CLASS B

B450	Class A Prime 45 or 50 Plates to 500, 15, 8, 4 ohms.....	3C	10.40
B530	Class B 53, 49 or 19 Plates to 500, 15, 8, 4 ohms.....	2C	8.30
B460	Class B 46 or 59 Plates to 500, 15, 8, 4 ohms.....	3C	8.30
B46RF	Class B 46 or 59 Plates to R. F. Load, Sec. Imp. 4,000 ohms. For best results use BMR1 as Modulation Reactor.....	3C	9.00
B53RF	Class B 53, 49 or 19 Plates to R. F. Load, Sec. Imp. 4,000 ohms. For best results use BC350 as Modulation Reactor.....	2C	9.00
BMO	Class B 10 Plates to R. F. Load, Sec. Imp. 4,000 ohms. For best results use BMR1 as Modulation Reactor.....	3C	10.20

REACTORS

Part No.	Use	Henries	Max. D.C. Res.	Ohms	Case	Price
BC100	Filter.....	10	200	100	3C	\$5.70
BC110	Swinging.....	10	200	115	3C	5.70
BC210	Filter.....	15	150	210	3C	5.70
BC350	Filter.....	30	90	350	2C	4.80
BC3000	Par. Feed Audio Reactor.....	250	10	3,000	1C	7.80
BC5000	Audio Choke (CT).....	280	10	10,000	1C	6.90
BC1000	Audio Choke (CT).....	45	110	800	1C	6.90
BMR1	Mod. Reactor.....	25	125	250	3C	6.00
BMR2	Mod. Reactor.....	25	300	150	LC2	9.60

SIZE OF CASES

	Height	Width	Depth
1C	3 3/4 in.	2 3/4 in.	3 in.
2C	3 3/4 in.	2 3/4 in.	3 3/4 in.
3C	3 3/4 in.	2 3/4 in.	5 in.
LC2	4 1/2 in.	6 1/2 in.	4 in.

PLATE TRANSFORMERS

Part No.		List Price
C803	High Volt. and Rect. Secs.—800 Volts C.T. 115 MA.—5 Volts 3 Amps. Heater Secs.—2.5 Volts C.T. 5 Amps.—2.5 Volts C.T. 12 Amps.....	8.10
C804	High Volt. and Rect. Secs.—850 Volts C.T. 165 MA.—5 Volts 3 Amps. Heater Secs.—2.5 Volts C.T. 5 Amps.—2.5 Volts C.T. 14 Amps.....	10.80
C805	High Volt. and Rect. Secs.—1,000 Volts C.T. 150 MA.—5 Volts 3 Amps. Heater Secs.—2.5 Volts C.T. 5 Amps.—2.5 Volts C.T. 10 Amps.....	12.60
C809	High Volt. and Rect. Secs.—750 Volts C.T. 100 MA.—5 Volts 3 Amps. Heater Secs.—2.5 Volts C.T. 3 Amps.—6.3 Volts C.T. 4 Amps.....	6.60
C817	High Volt. and Rect. Secs.—1,000 Volts or 750 Volts C.T. 200 MA.—5 Volts 3 Amps. Heater Secs.—2.5 Volts C.T. 8 Amps.—2.5 Volts C.T. 10 Amps.....	13.80



AUDIO

POWER

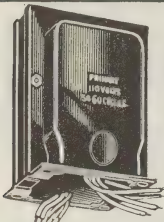
CHOKES



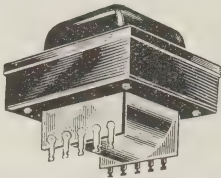
LINE

TRANSFORMERS

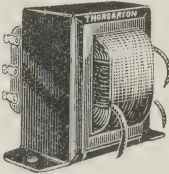
SOUND



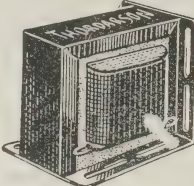
2G



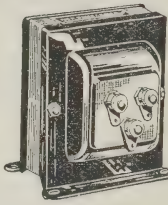
2H-2U



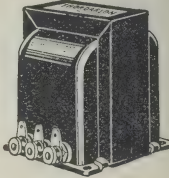
2B-2E



2C



2D



2A

Type 2U not illustrated is similar to Type 2H and includes mounting brackets that allows universal mounting.

POWER TRANSFORMERS

Part No.	Type	Sec. Volts	M. A.	Fil. Volts	H.	Size W. D.	List
T-5002	2H	620 C. T.	40	5V.—2A. 2.5V.—5A.	3"	3 1/2" 3"	\$3.30
T-7020	2H	600 C. T.	50	5V.—2A. 6.3V.—2A.	3"	3 1/2" 3"	3.30
T-6362	2H	700 C. T.	70	5V.—2A. 2.5V.—7A.	3 5/8"	3 7/8" 3 1/4"	4.20
T-5003	2H	700 C. T.	80	2.5V.—1.5A. 5V.—2A. 2.5V.—12A.	3 5/8"	3 7/8" 3 3/4"	4.50
T-5602	2G	700 C. T.	70	5V.—2A. 2.5V.—9A.	4 5/8"	3 3/4" 3 3/4"	\$5.10
T-5604	2G	700 C. T.	105	5V.—2A. 2.5V.—12A.	5"	3 3/4" 3 3/4"	6.30
T-5605	2G	700 C. T.	110	5V.—2A. 2.5V.—9A. 2.5V.—3A.	5"	3 3/4" 3 3/4"	6.90
T-7537	2U	650 C. T.	40	5V.—3A. 2.5V.—5.25A.	2 1/2"	2 1/2" 3"	\$2.80
T-7538	2U	650 C. T.	40	5V.—3A. 6.3V.—2A.	2 1/2"	2 1/2" 3"	2.80
T-7539	2U	700 C. T.	50	5V.—3A. 2.5V.—7A.	3"	2 1/8" 3 3/8"	3.30
T-7542	2U	700 C. T.	70	5V.—3A. 2.5V.—7A. 2.5V.—4A.	3 1/2"	3 1/8" 3 3/4"	4.30
T-7544	2U	700 C. T.	110	5V.—3A. 2.5V.—10.5A. 2.5V.—4A.	4"	3 1/2" 4 1/8"	5.40
FOR SOUND AMPLIFIERS							
T-5822	2G	730 C. T.	110	5V.—3A. 2.5V.—14A.	5"	3 3/4" 3 3/4"	7.20
T-7428	2G	880 C. T.	125	5V.—3A. 2.5V.—3A. 6.3V.—3.3A.	5"	3 3/4" 3 3/4"	7.80
T-6973	2G	700 C. T.	200	5V.—3A. 5V.—2A. 2.5V.—15A.	5"	3 3/4" 4 3/8"	9.60
T-7550	2G	870 C. T.	250	5V.—3A. 2.5V.—3A. 2.5V.—10A.	5"	3 3/4" 4 3/8"	9.60
T-6826	2G	1100 C. T.	150	6.3V.—1.5A. 5V.—3A. 7.5V.—2.5A. 2.5V.—5A.	5"	3 3/4" 4 3/8"	7.80

FILTER CHOKES

Part No.	Type	Henries at Load.	D. C. M. A.	D. C. Ohms	H.	Size W. D.	List
R-105	2C	10	75	266	2 1/4"	2 1/4" 1 7/8"	\$2.10
T-4707	2E	12	75	290	2 1/2"	2 6/8" 2"	2.10
T-6807	2B	15	85	375	3 3/4"	2 1/2" 2"	2.40
R-196	2A	15	85	375	3"	2 1/2" 2 1/2"	3.00
T-5753	2B	9.5	110	200	3"	2 1/2" 2"	2.40
T-1700	2D	8.75	130	231	3 3/4"	2 7/8" 3"	4.20
For Sound Amplifiers							
T-7430	2B	42	15	2100	2"	2 3/8" 1 1/2"	1.80
T-7549	2B	7.2	120	290	2"	2 3/8" 1 3/4"	1.60
T-7429	2G	10	150	200	4 5/8"	3 3/8" 3 1/2"	5.70
T-2353A	2G	5	200	80	3 3/4"	2 7/8" 3"	4.20
T-7751	2G	13	250	121	5"	3 3/4" 3 7/8"	7.20

IMPEDANCE CHOKES

Part No.	Type	Henries No. D. C.	D. C. M. A.	D. C. Ohms	H.	Size W. D.	List
T-2927	2B	1080	8	6150	2"	2 3/8" 1 1/2"	\$1.80
For Screen Grid Tubes							
T-6746	2B	510	5	6470	2 3/8"	2" 2"	2.40
For Triodes							

OUTPUT COUPLING TRANSFORMERS

Part No.	Type	Pri.	Sec. Ohms	H.	Size W. D.	List
T-5701	2E	Single or P. P. Power Tubes	.1 to 29	2 3/8"	2" 2"	\$2.40
R-107	2C	Single or P. P. Power Tubes	.1 to 29	2 1/4"	2 1/8" 1 7/8"	2.70
T-3399	2B	P. P. 45 etc.	6-12	2 3/8"	2" 2"	2.10
T-6754	2A	P. P. 2A3 or 45 Cl. AB	4/8/15/500	3 1/4"	2 7/8" 3"	6.00
T-5873	2D	P. P. 2A3	500	3 1/4"	2 1/2" 3"	4.20
T-6751	2A	P. P. 2A5, 47, 42, 33, 59 and 89 Pentodes or 10 Cl. A	4/8/15/500	3"	2 1/2" 2 1/2"	4.50
T-6594	2A	P. P. 50 Cl. A, 2A5-42 Cl. AB	4/8/15/500	3 1/2"	2 7/8" 3"	6.00
T-6748	2A	P. P. 45 Cl. A or 53 Cl. B	4/8/15/500	3"	2 1/2" 2 1/2"	4.50
T-7575	2A	P. P. 2B6 or 6B5	4/8/15/500	3 1/2"	2 7/8" 3"	7.20
T-6752	2A	P. P. 46 or 59 and P. P. Par. 53	4/8/15/500	3 1/2"	2 7/8" 3"	6.00
T-6126	2E	Univ. P. P. 2A5, 42, 47, 59, 89, 46, 45, 50 Cl. A	500	3"	2 1/2" 2"	3.60

AUDIO TRANSFORMERS

Part No.	Type	Purpose	Turns Ratio	H.	Size W. D.	List
R-100	2C	Single Plate	1:2	2 3/8"	2" 1 5/8"	\$2.10
T-5737	2B	to	1:3	3"	2 1/4" 2"	3.60
R-300	2A	Single Grid	1:3	3"	2 1/2" 2 1/2"	4.20
T-3391	2B	Single Plate	1:3.2	2 3/8"	2" 2"	\$2.40
T-5742	2B	to	1:3	3"	2 1/4" 2"	4.20
T-5741	2A	P. P. Grids	1:3	3"	2 1/2" 2 1/2"	4.50
T-6434	2B	P. P. 10,000 Ohm Plates to P. P. Cl. A Grids	1.3:1	3"	2 1/2" 2"	\$4.20
T-5870	2A	P. P. 10,000 Ohm Plates to P. P. or P. P. Par. Cl. A Tubes	1.5:1	3"	2 1/2" 2 1/2"	4.50

DRIVER TRANSFORMERS (CLASS A-AB-B)

Part No.	Type	Pri.	Sec. Ohms	H.	Size W. D.	List
T-5463	2A	30 to 19 Cl. B or 49 to 49 Cl. B.	2.4:1	2 3/8"	2" 1 7/8"	\$3.30
T-6747	2A	53, Plates in Par. to 53 Cl. B.	5.25:1	2 3/8"	2" 2 1/8"	3.30
T-6578	2A	2A5 Tri. to 2A5's P. P. Cl. AB.	2:1	3 1/2"	2 7/8" 3"	6.00
T-7432	2A	P. P. 56-76 to 42's, 2A5's, P. P. Cl. AB or 2A3's P. P. Par.	3:1	3"	2 1/2" 2 1/2"	4.50
T-7201	2A	P. P. 56's to 45's, P. P. Cl. AB	2.7:1	3"	2 1/2" 2 1/2"	4.50

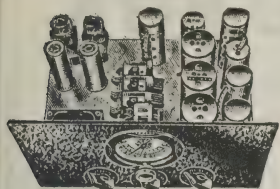
MICROPHONE, LINE, MIXER TO GRID TRANSFORMERS

Part No.	Type	Purpose	Pri. Ohms	Sec. Ohms	H.	Size W. D.	List
T-3020	2A	DB. Mike to Grid	200 CT	100,000	3"	2 1/2" 2 1/2"	\$4.20
T-5837	2A	DB. Mike to Grid	200 CT	100,000	2 3/8"	2" 2 1/8"	3.00
T-2357	2A	Sgl. B. Mike to Grid	100	400,000	2 3/8"	2" 1 7/8"	3.00
T-6193	2A	Line or Pick-up to Grid	500/125	100,000	3"	2 1/2" 2 1/2"	4.80

MICROPHONE OR PICK-UP TO LINE OR MIXER TRANSFORMERS

Part No.	Type	Purpose	Pri. Ohms	Sec. Ohms	H.	Size W. D.	List
T-6745	2A	DB. Mike to Line or Mixer	200 CT	200/50	3"	2 1/2" 2 1/2"	\$4.80
T-6197	2A	Ribbon Mike to Line or Mixer	.05	200/50	2 3/8"	2" 2 1/8"	3.60
T-6196	2A	Pick-up or Line to Mixer	500/125	200/50	3"	2 1/2" 2 1/2"	4.80

GEN-RAL SUPER DX6 ALL-WAVE KIT



A popular kit for the successful construction of an excellent All-Wave 6 tube Superhet, covering 15-545 meters in four continuous bands. The circuit is built around the latest multi-purpose tubes. Features full A.V.C.; tone control; $3\frac{1}{2}$ watts pentode output; tuned pre-selector, etc. Uses two 58, one 2A7, one 2A6, one 2A5 and one 80 tubes.

FOUR CONTINUOUS BANDS—15 to 545 METERS

The Super DX6 is easy to build. Complete detailed constructional data is simple to follow. You begin with the Foundation Kit which consists of drilled chassis and finished front panel. Then you assemble the parts, which include the assembled, wired and aligned Multi-Wave Coil Kit and the DeJong Assembled Band-spread Condenser Unit with Airplane Dial.

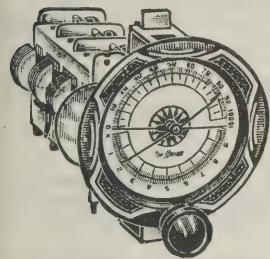
No. GR6CK—Complete Kit of Parts. Consists of Foundation Kit; Multi-Wave Coil Assembly described at right below; DeJong Condenser Assembly described below; all necessary additional parts. Less speaker and tubes. List.....\$52.50

No. GR6F—Foundation Kit. Consists of drilled chassis base, finished front panel and complete constructional data. List.....\$4.20

No. GR6CC—Coil and Condenser Kit. Consists of DeJong Band-spread Tuning Condenser with Airplane Dial and Multi-Wave Coil Assembly with two I.F. transformers. List....\$31.00

No. WD630—Matched 8-Inch Dynamic Speaker with output transformer. List.....\$6.30

DEJONG BAND-SPREAD CONDENSERS WITH AIRPLANE DIAL

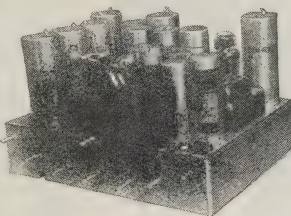


A new band-spread tuning unit providing electrical bandspread by a single dial and knob. Main tuning condenser drives one pointer; auxiliary bandspreading condenser drives other pointer. 4-inch Airplane Dial has dual scale, 0-100 and 0-10. Ingenious single knob drives both tuning and band-spread condensers.

Cat. No.	Bands	Mmf.	Price
No. DJ2140	2	370	\$12.60
No. DJ2370	2	140	12.60
No. DJ3140	3	370	13.80
No. DJ3370	3	140	13.80

GEN-RAL SUPER DX8 PROFESSIONAL SHORT-WAVE KIT

A completely engineered 8-tube Short-Wave Superhet, ready for construction. Tunes 17 to 200 meters in four bands. Features continuous Band-spread Tuning, Beat Oscillator for C.W. reception, Tuned R.F. stage, stand-by switch, manual or automatic Volume Control, latest tubes, pi-wound I.F.'s, optional Crystal Filter, etc. Uses two 58, one 2A7, one 2A6, one 2A5, two 56, one 80 tubes. The Coil Kit is completely assembled, wired and aligned. Band-spread Condenser Unit and Airplane Dial are assembled.



COMPLETE KIT OF PARTS

Consists of Foundation Unit including drilled chassis base and finished front panel; assembled 4-band Short-Wave Coil and Switching unit; assembled 3-gang condenser and dial unit; transformers, condensers, resistors, sockets, hardware, instructions, diagrams, etc. Less speaker and tubes.

No. GR8CK—List price.....\$67.00

No. GR8F—Foundation Unit. Consists of drilled and punched chassis base, finished front panel and constructional data. List price.....\$4.20

No. GR8CC—Coil and Condenser Kit. Consists of assembled Gen-Ral 4-band Short-Wave Coil Unit, with two I.F.'s, beat oscillator, and DeJong band-spread condenser. List price \$37.00

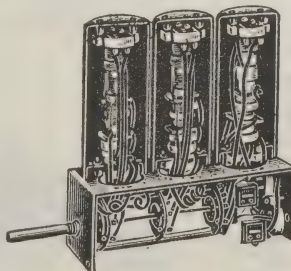
No. WD630—Matched 8 in. dynamic speaker. List price 6.30

GEN-RAL MULTI-WAVE COIL ASSEMBLY

For construction of an All-Wave Receiver. Used in Super DX6. Consists of Antenna, R.F. and Oscillator coils, assembled with 4 point wave-change switch, completely wired, with padders and trimmers. Includes two 456 K.C. I.F. transformers. Tunes 15 to 545 meters with 370 Mmf. 3-gang condenser.

No. GR28—Complete kit as described above. List.....\$17.90

No. GR28N—Less I.F. transformers. List price....\$14.70



ALL-WAVE KIT

Easy to Build—Tunes the World

Features

The Browning 35 All-Wave Set was designed for the broadcast listener who is interested in short-wave reception.

Four Bands

The receiver has a tuning range covering from 13.3 to 550 meters in four bands: (1) 8.5 to 22.6 M.C.; (2) 2.4 to 9.1 M.C.; (3) 1.42 to 3.92 M.C.; (4) .54 to 1.52 M.C. Bands are clearly marked on the full-vision dial, and extra scales are provided for logging or special callibration.

Sensitive and Selective

Sensitivity rated less than 1 microvolt per meter. Selectivity of 10 K.C. on all bands.

Excellent Band Spread

Unique method of band-spreading makes use of an auxiliary dial that revolves over a 360° arc and provides 40:1 ratio.

Tuned R.F. Stage

Set incorporates a stage of R.F. amplification ahead of the first detector and a sharply tuned ant. circuit.

"Band-Pass" I.F. Transformers

I.F. transformers have link coil which gives "band-pass" effect, with nose of curve approximately 5 K.C. wide, 6 tuned I.F. high "Q" circuits.

Simplified Construction

The receiver is exceptionally easy to build due to the comprehensive instructions furnished and because of the factory assembled TOBE tuner. Seven connections between tuner and rest of circuit. No plug-in coils.

Tubes used: one 2A6, one 2A5, one 56, two 58, one 80.

TOBE 35 TUNER UNIT

Consists of all-wave tuner completely wired and aligned, dial, dial cards, escutcheon and associate hardware.

No. ToBe 35U.....\$37.20

COMPLETE BROWNING 35 ALL-WAVE KIT

Contains all parts needed to completely construct the Browning 35 including chassis and panel but does not include cabinet, speaker or tubes.

No. ToBe 35CK.....\$79.80

TOBE AMATEUR COMMUNICATIONS RECEIVER KIT

FEATURES

◆ Designed solely for the 20, 40, 80 and 160 meter "ham" bands (and adjacent channels).

◆ Extreme selectivity afforded by the sharply tuned antenna circuit. R.F. pre-selection, and triple tuned double band pass link circuit L.F. amplification.

◆ Extremely low background noise allows speaker reception of weak C.W. signals. (ON-OFF.)

◆ Adjustable beat frequency oscillator.

◆ Single tuning control.

◆ No plug-in coils.

◆ Stand-by switch and phone jack on front panel.

◆ Regenerative I.F., manually controlled. For single signal C.W. reception or extreme selectivity when desired.

◆ Tubes used: two 6D6, one 6A7, one 75, one 42, one 76, one 80.

◆ Additional interchangeable dials for logging.

◆ Sensational mechanical and electrical band-spread.

No. ToBe 35HC—Tobe Communication Receiver Kit, complete less cabinet, speaker and tubes.....\$82.80

No. ToBe 35HU—35H Tuner Unit including dial, dial cards, escutcheon and associate hardware.....\$39.90

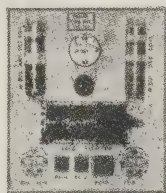
No. ToBe P—Drilled black crackle finish panel.....1.80

No. ToBe C—Drilled cadmium plated chassis.....6.00

No. ToBe MC—Metal cabinet, black crackle finish, with hinged cover. 17 1/2 in. wide, 9 1/2 in. high, 1 1/2 in. deep.....\$9.60

No. 1000B—8 in. W-D speaker in metal cabinet.....10.00

MILLER SHORT WAVE CONVERTER COIL KIT



A truly efficient short wave unit—built-in power supply. Can be used with supers or TRF sets. Tubes used: one 2A7, one 58 and one 80. Three bands covering 12 to 200 meters. Full instructions and diagrams furnished with each kit. Kit contains all necessary coils, band-change switch, trimmers, padders and chokes.

No. M301.....\$12.00

No. M301DC—Drilled chassis for M301.....2.70

No. M302C—Metal cabinet drilled for M301.....7.80

No. M150—Airplane dial for M301....3.90

(M301 uses regular 2-gang .00035 Mfd. condenser.)

MILLER PRESELECTION COIL KIT Covers 12 to 200 Meters

A high gain, 2 stage TRF amplifier for use ahead of any S.W. receiver. Self contained power supply. High gain coils. Absolute image suppression. Operates on either single wire or doublet antenna. Band-change switch. Tubes used: two 58 (or 6D6) and one 80. Full instructions and diagrams furnished.

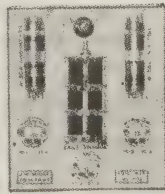
No. M302—Kit of coils, chokes, trimmers and band-change switch.....\$9.60

No. M302DC—Drilled chassis for M302.....2.70

No. M302C—Metal cabinet for M302 7.80

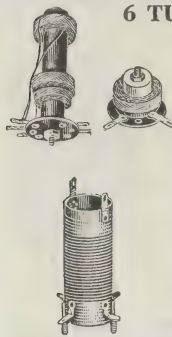
No. M150—Airplane dial for M302...3.90

(2-gang .00035 Mfd. condenser used.)



GUTHMAN RECEIVER COIL KITS

6 TUBE SUPERHET. SHORT-WAVE AND BROADCAST COIL KIT

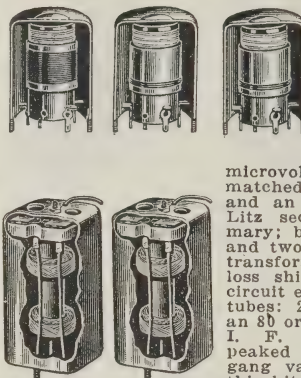


employs latest tubes: 6A7, 6D6, 76, 6C6, 42, and 80 or equivalent ALL-METAL tubes. Kit of six coils (all illustrated) includes an Antenna, R. F., two Oscillator coils, and two double-tuned I. F. transformers. Litz-wound, accurately peaked at 456 Kc., and mounted in square shield cans 1 1/2 ins. square by 3 ins. high. All leads color-coded. Circuit diagram included with each kit.

Complete Kit of 6 Matched Coils, including circuit diagram, less variable condenser. Shipping weight, 3 lbs.

Kit 401.....\$0.90

7 TUBE SUPERHET. BROADCAST COIL KIT

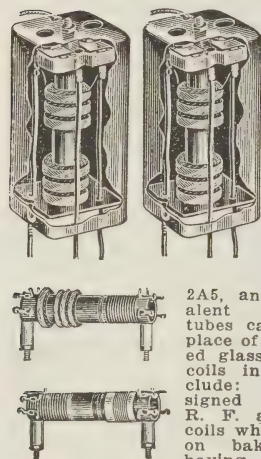


175 to 550 Meters
Police Calls, Etc.
Anyone with a fair knowledge of radio circuits can assemble this receiver with the aid of the circuit diagram included with each kit. Actual laboratory tests on receivers built from these units have proven them to have 10 Kc. selectivity over the entire tuning range, with a sensitivity of better than 1 microvolt. The kit of five perfectly matched coils includes an Antenna coil and an R. F. coil, both bank-wound Litz secondary, high impedance primary; bank-wound Litz oscillator coil, and two double-tuned Litz-wound I. F. transformers. All coils mounted in low-loss shield cans, as illustrated. This circuit employs seven of the latest type tubes: 2-58's, a 2A7, 65, 2-2A5's, and an 80 or equivalent ALL-METAL tubes. I. F. transformers are accurately peaked at 175 Kc. A .000365 mfd. 3-gang variable condenser is used with this kit.

Complete Kit of 5 Matched Coils, including circuit diagram, less variable condenser. Shipping weight, 2 lbs.

Kit 310.....\$7.90

5 TUBE SUPER COIL KIT 15-50 and 200-550 Meters



A. C. or A. C.-D. C.
Amazing results can be obtained by using this coil kit as a foundation for a very sensitive Broadcast and Short-wave receiver. Tubes used are as follows: for A. C.-D. C. 6A7, 78, 77, 43 and 1223; while for A. C. only 2A7, 58, 2B7, 2A5, and 80. Equivalent ALL-METAL tubes can be used in place of aforementioned glass tubes. Four coils in this kit include: specially designed center-tapped R. F. and Oscillator coils which are wound on bakelite tubing, having space-wound secondaries on short-wave sections and lateral Litz winding on broadcast secondaries; two Litz-wound double-tuned shielded I. F. transformers, peaked at 456 Kc.; all as illustrated. Complete with circuit diagram.

Kit 305.....\$7.50

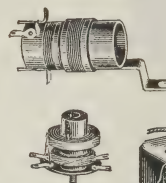
5 TUBE AUTO KIT

Superhet.
200-550
Meters

Using this kit as a foundation it is a simple matter to build a remarkably sensitive, highly selective 5-tube superhet auto radio. This advanced circuit employs 2 6D6's, a 6A7, a 76, and a 41 or equivalent ALL-METAL tubes. Five coils comprise the kit, as illustrated: Antenna, R. F. Oscillator, and two I. F. transformers. The first three coils mentioned are lateral space-wound for high efficiency, with Litz wire secondaries. The I. F. transformers are double-tuned and peaked at 175 Kc. All coils mounted in shield cans, as illustrated. Circuit uses Standard "B" Supply. A circuit diagram is furnished with each kit. Shipping weight, 4 lbs.

Kit 400.....\$6.50

5 TUBE SUPER HET. COIL KIT 200 to 550 Meters



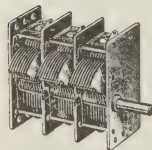
2 Gang Condenser
A. C. Only

An accurately designed kit of four coils for constructing the modern type of 5-tube A. C. Broadcast receiver. This circuit employs a 2A7 as R. F. Oscillator and Mixer, a 58 as I. F. amplifier, a 2B7 as diode detector and first A. F., a 2A5-output tube, and an 80 rectifier. Equivalent ALL-METAL tubes may be used. Kit includes four coils: Antenna, Oscillator, and two I. F. transformers. Last named are Litz-wound, shielded, double-tuned and peaked at 456 Kc. Square I. F. shield cans measure 1 1/2 ins. by 3 ins. high. All leads color-coded for easy identification. Shipping weight, 4 lbs.

Kit 308.....\$5.90

VARIABLE CONDENSERS

With Trimmers



For tuned radio frequency, 1/4 in. shaft, either right or left hand.
Two-gang, .000365 mf. Price\$2.00
Three-gang, .000365 mf. Price\$3.00
Four-gang, .000365 mf. Price\$4.00

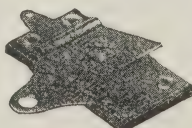
FOR SUPERHETERODYNES

1/4 in. shaft, right or left hand, oscillator section either end.
Two-gang, 456 kilocycles, tracking section. Price\$2.00
Three-gang, 456 or 175 kilocycles, tracking section. Price\$3.00
Four-gang, 175 kilocycles, tracking section. Price\$4.00

For band spreading, 1/4 in. shaft, right or left hand.

Two-gang, 50 mmf. each section. Price\$2.40
Three-gang, 50 mmf. each section. Price\$3.60

HAMMARLUND PADDING AND TRIMMING CONDENSERS



Equalizing condenser for neutralizing, balancing and trimming, 1 1/4 by 1/4 in.
EC-35—(3 to 35 mmf.)\$0.30
EC-80—(25 to 80 mmf.)\$0.30

"D-N LIST"

Isolantite Base

MICS70 — (10-70 mmf.)\$0.60
MICS140 — (70-140 mmf.)\$0.72
MICS220 — (140-220 mmf.)\$0.84
MICS1000 — (600-1000 mmf.)\$1.20



Isolantite Base



MICD70— (10-70 mmf.)\$0.96
MICD140— (70-140 mmf.)\$1.08
MICD220— (140-220 mmf.)\$1.20

R. F. And I. F. Transformers

ALADDIN POLY-IRON

I. F. AND R. F. INDUCTANCES

Employs cores made of Poly-Iron, a finely divided iron which increases the inductance of a coil without a proportionate increase in losses. Requires less turns of wire. Use of Poly-Iron coils will increase the gain per stage as well as over-all selectivity.

No. AI100—456 K.C. I. F. Transformers. Pri., 1.5 mh.; sec., 1.5 mh. \$3.60

No. AI125—370 K.C. I.F. Transformers. Pri., 1.5 mh.; sec., 1.5 mh. \$3.60

No. AI175—175 K.C. I.F. Transformers. Pri., 8 mh.; sec., 8 mh. \$3.60

No. AI200—465 K.C. Diode I.F. Transformers. Pri., 1.5 mh.; sec., 1.5 mh. \$3.60

No. AI275—175 K.C. Diode I.F. Transformers. Pri., 8 mh.; sec., 8 mh. \$3.60

Above all in Fig. 1 type.

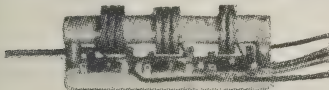
No. AI501—R.F. Antenna Coupler. \$2.40

No. AI1001—R.F. Interstage Coupling. 2.40

Above two items in Fig. 2 type.

TOBE I. F. TRANSFORMERS

Link Circuit—Triple Tuned



Same as used in Browning 35 All-Wave Receiver. All windings are made up of "pies" the middle winding being the link circuit. Gives sharp selectivity yet gives a broad nose tuning effect for full band width amplification. Tuned by mica, mounted on Isolantite condensers. Range 440-470 K.C.

FT1456—456 K.C., interstage. \$3.30

FTD456—456 K.C., diode. 3.30

TOBE BEAT FREQUENCY OSCILLATOR

Air-Tuned Variable Pitch

Unit includes grid leak and condenser. Tuning knob furnished. Frequencies adjustable 440 to 470 K.C.

TBFO456—456 K.C. \$4.20

SHIELDED ALL-WAVE COILS

Complete with Compensators

540 to 1,725 K.C.
1,650 to 6,000 K.C.
5,700 to 18,000 K.C.

Latest type as used in manufactured sets. Can be used with either 2 or 3 gang condensers. To be used with a 420 Mmf. variable condenser—that does not have compensators. Oscillator coils require following padding condensers:

540 to 1,725 K.C.—500 Mmf. semi-variable.

1,650 to 6,000 K.C.—.001 fixed condenser.

5,700 to 18,000 K.C.—.01 fixed condenser.

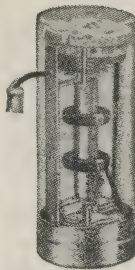
Use 3-section, 6-pole, 3-position switch for 3-gang set; and 4-pole, 3-position switch for 2-gang set. Recommended I.F.'s to be used with this unit, our No. 3107. Complete with hook-up diagram for 10-tube set using two 58's, one 2A7, one 75, one 53, two 56, two 2A3 and one 5Z3; and for 5-tube super use one 2A7, one 75, one 58, one 42 and one 80. Hook-up diagram for all leads, complete with trimming condensers in shield can 1 1/2 in. square by 4 in. high. 456 K.C. oscillator. No. A2200—Antenna coil. \$2.70

No. B2200—R.F. coil. 2.70

No. O3200—Oscillator coil. 2.50

For Better Radio Hammarlund PRECISION PRODUCTS

I. F. TRANSFORMERS Air-Tuned



Reduces "drift." Increased selectivity and sensitivity. Size, 5x2-3/32 inches.

ATT175—(175 K.C.) \$5.40

ATT465—(465 K.C.) 5.40

ATT525—(525 K.C.) 5.40

ATO465—(465 K.C. beat oscillator) 5.40

The three I. F.'s listed can be had center-tapped. Just add "C.T." to catalogue number.

MIDGET I. F. TRANSFORMERS

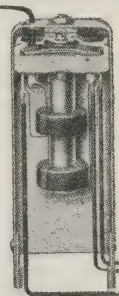
Square aluminum shield can. 3 1/2 in. high by 1 7/16 in. square. Same specifications as round can type T listed below.

ST—465-465 K.C. \$1.98

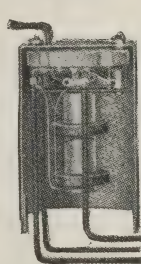
ST—465 C. T.—465 K.C. center-tapped 1.98

ST—175-175 K.C. 1.98

ST—175 C. T.—175 K.C. center-tapped 1.98



TYPE "T" I. F. TRANSFORMERS



All transformers are tuned grid, tuned plate type with lattice wound coils impregnated to prevent moisture effects. Litz windings are used in 465 K.C. short wave transformers. Tuning condensers are mica type mounted on Isolantite and adjustable from top of the shield can. Leads R.M.A. color coded and tagged. Secondaries are either plain for standard screen grid tubes or center-tapped for tubes requiring split input circuits such as Wunderlich tubes, 55's, 75's, 83's, 2A6's, etc.

Aluminum shield cans measure 2 1/2 in. O. D. by 3 1/2 in. high. Mounting is on 2-inch centers.

T465—(465 K.C.) \$1.98

T175—(175 K.C.) 1.98

TBO—Beat oscillator (465 K.C.) 1.98

T465—C.T. 1.98

T175—C.T. 1.98

NATIONAL "I. F." TRANSFORMERS

Air dielectric condenser tuned, statite insulation, Litz wound coils, aluminum plates. Furnished in 456 K.C.

No. NIF.....\$6.00

Beat Oscillator Unit. Same features as National "I. F." transformers and knob tuning.

No. NBO.....\$6.00

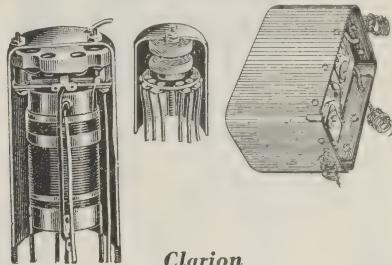


BEAT FREQUENCY OSCILLATOR

Adjustable. 3x1 1/2 inches. No. MC465.....\$2.10



EXACT DUPLICATE I. F. TRANSFORMERS



Clarion

Clarion Part No. G1373 for Model 220 and others. Composite oscillator and I. F. unit—2 sets of coils in shield can. No. 3094.....\$3.60

Majestic

Model 20—1st I. F., No. FGG201...\$3.60

Model 20—2nd I.F., No. FGG202... 3.90

Model 460—1st I. F., No. M10148... 1.80

Model 460—2nd I. F., No. M10253... 1.10

Model 15-15B—Ant. coil, No. M4430 1.20

Model 15-15B—R. F. coil, No. M4431 1.20

Model 15-15B—Composite osc. and 1st I. F., No. M4428..... 3.30

Model 15-55—Using local-distance switch, 1st I. F., No. M4429..... 2.00

Model 15-15B-150—Without local-distance switch, 1st I. F., No. M8334..... 1.90

Model 111—(Auto set), 1st I. F., No. M8323..... 2.40

MAJESTIC REPLACEMENT I. F. TRANSFORMERS



Wound of double enameled wire on Kraft paper tubing and impregnated with an insulation that will withstand heat and moisture. Supplied less tuning condenser and can.

Part No.	Model No.		List Price
F 4428	15-15B-150	1st	\$0.80
F 3384	15-15B-150	2nd	.90
F 5326	25-25B	1st	1.00
F 5337	25-25B	2nd	1.00
F 6506	55	1st	1.00
F 4429	55	2nd	1.00
F 6984	120	1st	1.20
F 5257	120	2nd	1.40
RF 200	200	1st R.F. Choke	1.10
F 6250	200	1st I.F.	.90
F 6254	200	2nd	1.20
F 6119	210	1st	.90
F 6123	210	2nd	1.20
F 6127	210	3rd	.90
F 7812	310-330-390	2nd	1.10
F 9094	360	2nd	.90
F 9668	400	2nd	1.40
F10538	440	1st	1.10
F10528	440	2nd	1.40
F10149	460	1st	.90
F10253	460-490-491-493	2nd	1.10
F10843	500	1st	.90
F11705	500	2nd	1.40
F11014	520-800	2nd	1.20
F 8863	Ford Auto Radio	1st I.F.	1.40
F 7785	Dimmer Reactor Plate Coil only		1.20
F 7785	Dimmer Reactor Complete Unit		2.30
F 7187	Primary Coil used as R.F. Plate Coil in Models 290, 300, 310, 330, 520, 490, 460		.90

R.C.A. REPLACEMENT I. F. TRANSFORMERS

F 801	R.C.A. 80	1st I.F.	\$0.80
F 802	R.C.A. 80	2nd I.F.	.90

CLARION REPLACEMENT I. F. TRANSFORMERS

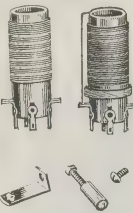
F 2602	260	2nd I.F.	\$1.40
F 2202	100-220	2nd I.F.	1.40
F 2201	220	1st I.F.	1.40
F 3202	220	2nd I.F.	1.40
F 3401	340	1st I.F.	1.40

GUTHMAN R. F. AND I. F. TRANSFORMERS

R.F. AND ANTENNA COILS

175 to 550 Meters

Matched real hi-gain coils for T.R.F. receivers. Litz bank-wound secondaries with either high or low impedance primaries, as desired. Supplied complete with mounting bracket, dowel and brass mounting screws. Coil diameter $\frac{7}{8} \times 2\frac{1}{4}$ in. long. For use with standard .00036 mfd. variable condenser. Coil connection diagram with each. Excellent for replacement for constructors.

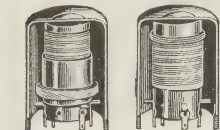


Part No.	Type Coil	Prim. Imp.	Your Cost
A1008	Ant.	Low	\$0.58
B1008	R.F.	Low	.58
A1001	Ant.	High	.68
B1001	R.F.	High	.68

SHIELDED LITZ R.F. & ANT. COILS

175 to 550 Meters

For T.R.F. or Superheterodyne receivers, when used with proper oscillator coil. Precisely matched. Completely shielded in can whose dimensions are 1 1/2 in. diameter, 2 1/4 in. high with two 6/32 in. spade lugs. Available with high or low impedance primaries. When used with screen grid tubes high impedance primaries are desirable in order to secure proper gain. Windings are of solenoid type—which results in a coil of maximum inductance (for given amount of wire) and least R.F. resistance. Designed for use with .00035 mfd. variable condenser. Covers complete B.C. band—175 to 550 K.C. Each coil supplied complete with instructions and diagram.



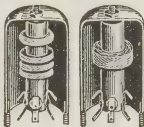
Part Type Prim. Imp. Your Cost

No. A1007	Ant.	Low	\$0.68
A1018	Ant.	High	.80
B1007	R.F.	Low	.68
B1018	R.F.	High	.80

MIDGET ANTENNA R.F. AND OSCILLATOR COILS

1 1/4 x 1 1/4 in. high.

A2098—Ant. Coil.
B2098—R.F. Coil.
O3098—Oscillator Coil.
List\$0.90



Small size high gain shielded coils. Designed for Superheterodyne and T.R.F. receivers requiring compact efficient coils. Newest type Litz wire sectional winding with low R.F. resistance and distributed capacity. For use with .000365 (.00035) mfd. variable condensers. All coils may be used in any combination desired. Supplied complete with wiring diagram.

ANT. R.F. & OSC. COILS

15-55 and 200-550 Meters

Very popular style of coil. Covers two most desired ranges, domestic broadcast and foreign short-wave. Short-wave section is space-wound on threaded bakelite. Mounting bolts on dowel stick facilitate proper installation. For use with .000365 variable condenser (standard type). Supplied with diagram.

List

A2050—Antenna Coil.....	\$1.40
O3090—Oscillator Coil (456 K.C.)...	1.20
B2050—R.F. Coil.....	1.40

SHORT-WAVE SHUNTS



No. 2048—Price, each \$0.34
Enables receivers designed only for the regular 200 to 550 meter band to include 75 to 200 meter short-wave bands. Small size, $\frac{7}{8} \times \frac{3}{4}$ in. high. Diagram showing how to connect in the circuit included. One short-wave shunt is required for each antenna and each R.F. coil in set. Get police calls on car sets—used with a switch.

ANTENNA AND OSCILLATOR COILS FOR SUPERHETS



Lateral-wound oscillator and antenna coils for superhets. Coils can be used separately if desired, or can be used in pairs. These coils make ideal replacements for standard sets. Broadcast coils wound on a dowel, $\frac{1}{2} \times 1$ in. long. Broadcast-short-wave coils wound on a dowel, $5/16 \times 1\frac{1}{2}$ in. long. Instructions and diagram with each coil. Broadcast coils cover 1,500 to 550 K.C., and combination short-wave and broadcast cover 1,500-550 K.C. and 4,000-1,500 K.C.

No. A2037—Antenna Coil. List.....\$0.84
No. A3015—Short-Wave and Broadcast Coil. List.....1.14

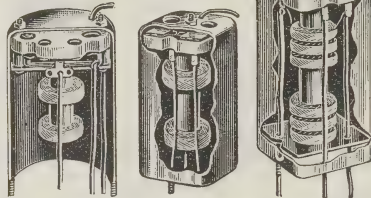
Broadcast Oscillator Coils

No. O3014—175 K.C. List 1.00
No. O3019—465 K.C. List 1.00
No. O3080—465 K.C. List 1.00

Short-Wave and Broadcast Oscillator Coils

No. O3042—175 K.C. List.....\$1.30
No. O3015—465 K.C. List.....1.30

I.F. TRANSFORMERS In Metal Shield with Tuning Condensers



For use as replacements or in new set design. Can be used in any combination required for I.F. stages. Tuning condensers are of the mica compression type, on isolantite bases and are adjustable from the top of the shield can. Leads are color coded. Diagram furnished with each unit. The inductances are the lattice wound type mounted on wood forms specially impregnated and impervious to moisture. Coils in round and square shields have same electrical characteristics and are interchangeable.

I.F. COILS IN ROUND SHIELD Shield Size 2-1/16 in. Diameter x 3 in. High. Spade Bolt Mounting Centers 1-15/16 in.

Double Tuned	Peak Frequency in Kilocycles	Frequency Range
No. 3018	465	442-470
No. 3052	380	365-395
No. 3012	175	168-180
List price.....		\$1.60

I.F. COILS IN SQUARE SHIELD Shield Size 1 3/4 in. Square x 3 in. High. Spade Bolt Mounting Centers 1 3/4 in.

Double Tuned	Peak Frequency in Kilocycles	Frequency Range
No. 3103	465	442-470
No. 3050	380	365-395
No. 3032	175	168-180
List price.....		\$1.64

DELUXE I.F. TRANSFORMER HIGH "Q" WINDINGS

Coils are new triple section series wound type. R.F. resistance and distributed capacity are reduced to a minimum giving a maximum "Q". Highest practical sensitivity and selectivity. Trimm. condenser adjustable from top of shield can. Double tuned 4-lead transformers. Diagram showing coding of leads included. Size: 1 1/4 in. square, 5 in. high. Spade bolt mounting, centers 1 1/4 in.

Double Tuned	Peak Frequency in Kilocycles	Frequency Range
No. 3107	465	442-470
No. 3120	380	365-395
List price.....		\$2.20

CENTER TAPPED SECONDARIES

For Use with Wunderlich, 55s, 75s, etc.

Type "C" Large	Type "B" Medium
No. 3070—465 K.C. List price.....\$0.95	No. 3074—465 K.C. List price.....\$0.85

"D-N LIST"

UNSHIELDED R.F. COILS

80 to 550 Meters



Compact and efficient short-wave and broadcast coils. Short-wave range 80 to 200 meters. Broadcast range 200 to 550 meters. Lateral

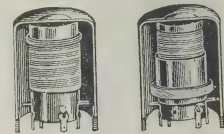
wound primaries and secondaries. For .000365 condenser. Diagram with each. No. A2021—Antenna Coil. Price....\$1.10
No. B2021—R.F. Coil. Price.....1.10

SW & BCL HI-GAIN LITZ COILS

120 to 200 Meters

200 to 545 Meters

Completely shielded 2-band coils. Comprises hi impedance primary with Litz wound secondary tapped for low wavelengths. For use with .00035 mfd. variable condenser. Can 1 1/2 in. diameter and 2 1/4 in. high, with spade bolts for mounting. Also diagram. No. A1022—Antenna Coil. Price....\$0.94
No. B1022—R.F. Coil. Price......94



UNSHIELDED ANT. & R.F. COILS

75 to 550 Meters

High impedance primary of plain enamel wire. Has shunt winding adjacent to secondary to cover the short-wave band, recommended for maximum efficiency in comparison to the tapped coils. Tunes with usual .00035 mfd. variable condenser. Covers 75 to 200 and 200 to 550 meters. Wiring diagram furnished showing coil connections. Coil size is $\frac{7}{8} \times 2\frac{1}{4}$ in. long. Mounting bracket and dowel, brass mounting screw and bolt furnished.

No. A120—Antenna Coil. Price....\$0.66
No. B120—R.F. Coil. Price......66

COMPOSITE UNITS

High-gain composite coil used as combination I.F. and oscillator. Designed for the special tracking section on the variable condenser. Top tuning. This unit is furnished in 175 K.C. and 456 K.C. frequencies, mounted in a shield 1 1/2 in. in diameter by 3 1/4 in. in height. Equipped with two spade-mounting bolts.

Each

No. 3094—175 K.C.....	\$2.60
No. 3183—456 K.C.....	2.60

HIGH-GAIN COMPACT BROADCAST AND POLICE BAND COIL

High impedance primary, triple section Litz wire secondary, for use with .000365 condenser. Covers a range of 75 to 200, and 200 to 540 meters. Band switching may be accomplished with a double pole single throw switch. Coils are $\frac{7}{8}$ in. diameter x $1\frac{1}{4}$ in. long, impregnated form, with a single hole mounting bracket.

No. A1066—Antenna Coil. Price....\$0.60
No. B1066—Interstage R.F. Coil. Price......60

PRIMARY REPLACEMENT WINDING

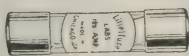


High impedance silk enamel windings for replacing burned out antenna primaries. Sliding collar permits variation of coupling in relation to secondary.

No. 6000—For 1 1/4 in. outside diameter of secondary coil. Price.....\$0.15
No. 6001—For 1 in. outside diameter of secondary coil. Price.....\$0.15
No. 6002—For 3/4 in. outside diameter of secondary coil. Price.....\$0.15
No. 6003—For 1/2 in. outside diameter of secondary coil. Price.....\$0.15

Meter Shunts, Fuses, Rectifiers

LITTELFUSES



Rating Amps.	Max. Load M.A.	M.A. Movements	Net Price
1/100	10	Up to 0-1	\$0.12
1/32	25	0-1 to 0-10	.12
1/16	60	0-10 to 0-25	.12
1/8	100	0-25 to 0-75	.09
1/4	200	0-75 to 0-150	.09
3/8	300	0-150 to 0-250	.09
1/2	400	0-250 to 0-350	.09
3/4	600	0-350 to 0-500	.09
1	1000	0-500 to 0-750	.06
1 1/2	1500	0-750 to 0-1000	.06
2	2000	0-1000 to 0-1500	.06

LITTELFUSE MOUNTINGS



No. 1010 — For
Littelfuses. 1 in.
x .250 in.
Each\$0.09

METER-BACK MOUNTING

No. 1059..\$0.09
For Littelfuses

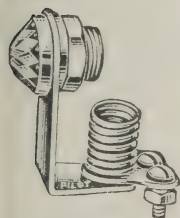


RADIO- GRYP CONNEC- TOR

No. 1039—Permits fuse to hang
directly in the "line." Pair \$0.06

See 3AG and 1AG fuses on
page 31

PILOT LITE BRACKET



With jewelled in-
dicator — red or
green.

310R—Red 30c
310G—Green 30c

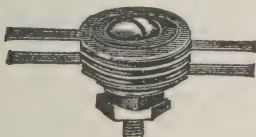
Red or green
jewelled indica-
tor only....15c

CLIP-ON PILOT LITE SOCKET

For standard radio pilot
lites. Each.....\$0.05

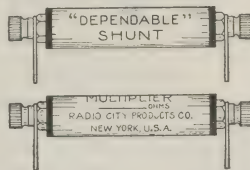


METER RECTIFIERS



Converts a DC milliammeter into
an AC voltmeter. Fully guaran-
teed. Life is indefinite when its
rating of 20 M.A. is not exceeded.
Full instructions and circuits are
sent with each unit.

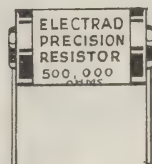
No. CRS-M—Full wave...\$2.10
No. CRS-B—Half wave... 2.10



DEPENDABLE SHUNTS— MULTIPLIERS

2% Accuracy

Resistance Value	Price
All values up to 75000 ohms. Each.....	\$0.48
Values from 80000 ohms to 200000 ohms. Each..	.66
Values from 225000 ohms to 500000 ohms. Each..	.99
Values from 600000 ohms to 1 meg. Each.....	1.35
Shunts for meters having resist- ance of 27-30 or 50 ohms (specify S27, S30 or S50). For 5, 10, 25, 50, 100, 250, 500, 1000 M.A. Each shunt.....	\$0.75



ELECTRAD PRECISION WIRE-WOUND RESISTORS

1% Accuracy
Size 1x9/16 Inches.
Rating—1 1/2 Watts.

Type 6P

Resistance Ohms	Max. Potential in Volts	Maximum Current in Milliamperes	Price
1	1.2	1,225	\$0.51
5	2.7	548	.51
10	3.8	387	.51
25	6.1	245	.51
50	8.6	173	.51
100	12	122	.51
150	15	100	.51
200	17	86	.51
300	27	55	.51
1,000	38	38	.54
2,500	61	24	.54
4,500	82	18	.60
5,000	86	17	.60
7,500	106	14	.60
10,000	122	12	.60
12,500	137	11	.66
15,000	150	10	.66
20,000	173	8.6	.81
25,000	194	7.7	.81
30,000	212	7	.81
35,000	229	6.5	.81
40,000	245	6.1	.81
50,000	274	5.5	.81
60,000	300	5	.96
75,000	336	4.4	.96
100,000	387	3.8	1.10
125,000	433	3.4	1.25
150,000	475	3.1	1.40
175,000	510	2.9	1.40
200,000	548	2.7	1.40
225,000	580	2.5	1.55
250,000	610	2.4	1.55
300,000	670	2.2	1.70
400,000	750	2.0	1.80
500,000	750	1.5	2.05
750,000	750	1.0	2.70
1,000,000	750	.7	3.15

FERRULE TERMINALS

Can be placed on ends of Electrad
6P resistors. Per pair.....\$0.15

METAL COVER FUSE BOX



Metal covered 3AG fuse
mounting for new metal
tube sets. Meets Under-
writers' requirements.
Cadmium plated parts.
Has 6-32 mounting screws
at 2 1/4-inch centers, over-all size 2 1/2 x 3/4
inches, bakelite base.
No. L63—Your price.....\$0.12

SEMI-PRECISION



RANGE MULTIPLIER RESISTORS

Popular sizes of resistors for use as meter
range multipliers, 1-watt, semi-precision.
The * marks resistors which allow for
the 50-ohm internal resistance of the
meter. When used with 0.5 mill. meters,
divide volt range by 2.

Ohms	Volts	Ohms	Volts
1,450	* 1.5	50,000	50
2,950	* 3	60,000	60
3,500	* 3.5	75,000	75
4,450	* 4.5	85,000	85
4,950	* 5	90,000	90
5,000	5	100,000	100
5,500	5.5	150,000	150
5,950	* 6	200,000	200
7,450	* 7.5	250,000	250
8,500	8.5	300,000	300
8,950	* 9	450,000	450
9,950	* 10	500,000	500
10,000	10	600,000	600
13,500	13.5	750,000	750
15,000	15	800,000	800
25,000	25	900,000	900
30,000	30	1,000,000	1,000

Type CPR—Semi-Precision, 1-watt size.
Each\$0.18

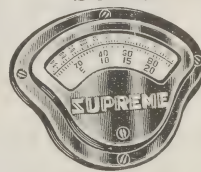
ACORN PENTODE V. T. VOLTMETER KIT



Contains all ma-
terials required to
build new Vacuum
Tube Voltmeter
Kit using new Type
954 Acorn pentode
tube. Can be as-
sembled in one
hour. The ideal
meter for service-
men, experiment-
ers, etc. Small size
and novel structure (see probe above)
permit tube itself to be placed at point
of measurement, thus avoiding long leads
and high input capacitances. Supplied
complete down to last detail, except
microammeter. Materials to assemble the
flexible Acorn tube probe described above
are also supplied. Complete instruction.
Less tube and microammeter.

No. I1036.....\$6.00

SUPREME METER



Five - inch, fan-
shaped case with
longer scales and
larger figures. Me-
ter is 1,000 ohms
per volt. Ranges
AC and DC Volts:
5, 125, 500, 1,250.
AC-DC mils.: 5,
125. Resistance:
2,000-200,000 ohms

(with 4.5-volt battery can be extended to
2 megs. by using 45-volt battery.)
Supreme Meter only.....\$6.25
Supreme Rectifier..... 2.75
Supreme Resistor Kit (includes all re-
sistors, fixed and variable, to get above
ranges; also contains one capacitor).
Resistor Kit.....\$1.00

NEON FOR OCT., 1935, QST OSCILLOSCOPE

LITTELFUSE NEON TATTELITE

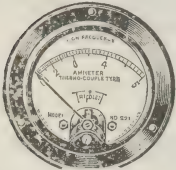
Make your own oscilloscope per the ar-
ticle in the Oct., 1935, QST. A highly
sensitive neon with a generous size (6 in.
long) electrode for scanning. Comes with
mounting clips and mirror with motor
shaft adapter. Made and guaranteed by
Littelfuse Labs.

No. LNT.....\$2.00

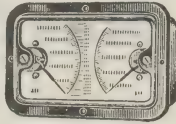
NEON BULB SOCKET

A sturdily built porcelain socket with
candelabra base. The 1/4 watt neon bulb
shown on page 108 fits this socket.
No. E304.....\$0.10

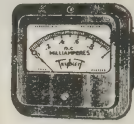
See Other Neon Bulbs on
Pages 29, 108



Model 321—D.C.
Model 331—A.C.
Model 341—R.F.
Size: 3 1/2 in. flush.
Scale: 2% in. long.



Model 421—D.C.
Model 431—A.C.
Model 441—R.F.



Model 221—D.C.
Model 231—A.C.
Model 241—R.F.
Size: 2% in. flush.
Scale: 1% in. long.

Accuracy 2% TWIN INSTRUMENT
D'Arsonval type with an extra light moving coil and reinforced strong parts. Special quality chrome steel magnets. Sapphire jewel bearings. White enameled dials. Well damped—can be "keyed." Bakelite cases. Fully guaranteed. The fastest selling line of meters on the market.

D. C. MILLIAMMETERS

D. C. M. A.	Part No. Model 321	Your Cost	Part No. Model 221	Your Cost	Part No. Model 421	Your Cost
0-1	321-1	\$4.67	221-1	\$3.82	421-1	\$1.667
0-1.5	321-1P5	4.67	221-1P5	3.82		
0-3	321-3	4.67	221-3	3.82		
0-5	321-5	3.82	221-5	3.00	421-5	5.00
0-10	321-10	3.82	221-10	3.00	421-10	5.00
0-15	321-15	3.82	221-15	3.00		
0-25	321-25	3.82	221-25	3.00	421-25	5.00
0-50	321-50	3.82	221-50	3.00	421-50	5.00
0-75	321-75	3.82	221-75	3.00		
0-100	321-1H	3.82	221-1H	3.00	421-1H	5.00
0-150	321-1H5	3.82	221-1H5	3.00	421-1H5	5.00
0-200	321-2H	3.82	221-2H	3.00	421-2H	5.00
0-250	321-2H5	3.82	221-2H5	3.00	421-2H5	5.00
0-300	321-3H	3.82	221-3H	3.00	421-3H	5.00
0-500	321-5H	3.82	221-5H	3.00	421-5H	5.00
0-750	321-7H5	3.82	221-7H5	3.00		
0-1000	321-1G	3.82	221-1G	3.00		

D. C. MICROAMMETERS

0-200	321-A2H	\$8.00	221-A2H	\$7.00	421-A2H	9.33
0-500	321-A5H	6.17	221-A5H	5.17	421-A5H	7.17

Model 221 is a flush bakelite case instrument with a flange. Model 223 is a 2-5/16-inch clamp-on type and can be had at same price as Model 221.

D. C. VOLTMMETERS
125 Ohms Per Volt

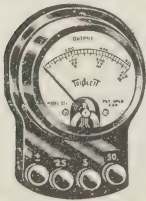
D. C. Volts	Part No. Model 321	Your Cost	Part No. Model 221	Your Cost	Part No. Model 421	Your Cost
0-5	321V5	\$3.82	221V5	\$3.00	421V5	\$5.00
0-10	321V10	3.82	221V10	3.00	421V10	5.00
0-25	321V25	3.82	221V25	3.00		
0-50	321V50	3.82	221V50	3.00	421V50	5.00
0-100	321V1H	3.82	221V1H	3.00	421V1H	5.00
0-150	321V1H5	3.82	221V1H5	3.00	421V1H5	5.00
0-200	321V2H	4.67	221V2H	3.82		
0-300	321V3H	5.50	221V3H	4.33	421V3H	6.50
0-500	321V5H	6.17	221V5H	5.17		
0-750	321V7H5	7.33	221V7H5	6.17		
0-1000	321V1G	9.50	221V1G	8.50		
0-2000	321V2G	11.67	221V2G	10.67		

D. C. VOLTMMETERS
1000 Ohms Per Volt

0-5	321Z5	\$5.50	221Z5	\$4.33	421Z5	6.50
0-10	321Z10	5.50	221Z10	4.33	421Z10	6.50
0-25	321Z25	5.50	221Z25	4.33		
0-50	321Z50	5.50	221Z50	4.33	421Z50	6.50
0-100	321Z1H	5.83	221Z1H	5.17	421Z1H	6.50
0-300	321Z3H	6.67	221Z3H	5.83	421Z3H	7.67
0-500	321Z5H	7.33	221Z5H	6.67		
0-750	321Z7H5	9.17	221Z7H5	8.00	421Z7H5	10.67
0-1000	321Z1G	10.67	221Z1G	9.50	421Z1G	12.33
0-2000	321Z2G	16.50	221Z2G	15.33		

D. C. AMMETERS

D. C. Amps.	Part No. Model 321	Your Cost	Part No. Model 221	Your Cost
0-3	321R3	\$3.82	221R3	\$3.00
0-5	321R5	3.82	221R5	3.00
0-10	321R10	3.82	221R10	3.00
0-25	321R25	3.82	221R25	3.00
5-0-5	321R55	3.82	221R55	3.00
10-0-10	321R101	3.82	221R101	3.00
20-0-20	321R202	3.82	221R202	3.00



THE TRIPLETT OUTPUT METER

No. TOM—Four ranges: 0-2.5, 5, 10, 50 volts. Copper oxide rectifier type. Contains condenser for blocking D.C. component test leads with clips and break-in adapter furnished. With tip jacks or binding posts. . . . \$8.16

TRIPLETT-S METERS

When used on receiving sets, measure R.F. broadcast signal strength. Scale reads S-5. Knife-edge pointers.

- No. 321-S13—1/3 M.A. sensitivity. . . . \$5.00
- No. 221-S13—1/3 M.A. sensitivity. . . . 4.17
- No. 221-S5—5/1000 M.A. sensitivity. . . . 4.17
- No. 221-S5—5/1000 M.A. sensitivity. . . . 3.33

A. C. VOLTMETERS

A. C. Volts	Part No. Model 331	Your Cost	Part No. Model 231	Your Cost	Part No. Model 431	Your Cost
0-3	331-3	\$3.82	231-3	\$3.00	431-3	5.00
0-5	331-5	3.82	231-5	3.00	431-5	5.00
0-10	331-10	3.82	231-10	3.00	431-10	5.00
0-15	331-15	3.82	231-15	3.00	431-15	5.00
0-25	331-25	3.82	231-25	3.00	431-25	5.00
0-50	331-50	3.82	231-50	3.00	431-50	5.00
0-100	331-1H	3.82	231-1H	3.00		
0-150	331-1H5	4.67	231-1H5	3.82	431-1H5	6.00
0-300	331-3H	5.50	231-3H	4.83	431-3H	6.50
0-500	331-5H	7.33	231-5H	6.67		
0-15-150	331-155	6.17				
0-150-750	331-157	10.00				

THERMOCOUPLE AMMETERS
(High Frequency)

Accuracy 2%

Have external couples which will withstand 50% overload. Connected to meter with 2-ft. leads.

Range R. F. Amps.	Part No. Model 241	Your Cost	Part No. Model 341	Your Cost	Part No. Model 441	Your Cost
0-1	241-1	\$10.67	341-1	\$12.00	441-1	\$15.80
0-1.5	241-15	10.67	341-15	12.00	441-15	15.80
0-2.5	241-25	10.67	341-25	12.00	441-25	15.80
0-5	241-5	10.67	341-5	12.00	441-5	15.80

VOLT-OHM-MILLIAMMETERS

These instruments are 0-1 D.C. Mil. Meters with 100 ohms internal resistance—with knife-edge pointers. Require 1.5 volts. No. 321A—Scale reads 30-300-600 volts, 30-300 mls., 100,000 ohms . . . \$5.00

No. 321B—Scale reads 10-50-250-500 volts and mls. and 100-000 ohms . . . \$5.00

No. 521C—(large 4 1/2 in. meter). Scale reads 10-50-250-500 volts and mls. and 100,000 ohms. . . . \$10.33

No. T30—Res. on bak. strip for 30-300-600 volts . . . 5.83

No. T31—Shunts on bak. strip for 30-300 mls. . . . 1.33

No. T64—Current limiting res. for 100,000 ohms. 67

No. T10—Res. on bak. strip for 10-50-250-500 volts. . . . 5.83

No. T11—Shunts on bak. strip for 10-50-250-500 mls . . . 3.33

No. T12—Current limiting res. for 100,000 ohms. 67

RESISTANCE INSTRUMENTS

3 in. Case				2 in. Case			
Part No.	Volts	Range Ohms	Your Cost	Part No.	Volts	Range Ohms	Your Cost
T-315	0-1.5	0-1,000	\$4.67	TS-215	0 to 1.5	0-50,000	\$4.67
T-3150	0-1.5	0-100,000	5.50				
T-45	0-4.5	0-50,000	5.50				
T-450	0-4.5	0-150,000	5.50				

TR-R Resistor for 0-1M.A. to make Voltmeter
0-15-60-300-600. . . . \$5.83

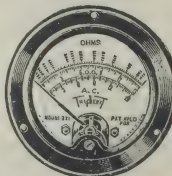
UNIVERSAL A.C.-D.C. METER
Copper Oxide Type

D.C.—2% accuracy.
A.C.—5% accuracy.

A.C. scale in red.
D. C. scale in black.

Reads 0-1500, 0-1.5 megs. in ohms; 0-15-150-750 volts A.C. or D.C. at 1,000 ohms per volt. D.C. mil. readings are 0-15-150 M.A. Use with double pole double throw switch.

No. TUM321—(0-4 M.A.) with copper oxide unit and switch, complete. . . \$10.00
No. T1127—Kit consisting of mounted resistors and shunts for all above readings, selector switch, rheostat, jacks, panels, bar knobs, batteries (22.5 and 1.5 volts). Complete, less meter. . . . \$13.33



WESTON METERS READRITE TRIPLETT HOYT



WESTON

We carry a complete stock of Weston Meters. We are listing only the most popular types. If you want any other Weston Meters, just write in. Our prices are as low as any distributor and we can get it to you quicker.

DC MILLIAMMETERS—MODEL 301

Range	Price	Range	Price
1	\$7.50	100	\$6.75
5	6.75	150	6.75
10	6.75	200	6.75
30	6.75	300	6.75
50	6.75	500	6.75

THERMOCOUPLE AMMETERS

Weston Model 425

0 to 1, 0 to 1.5, 0 to 2, 0 to 3, 0 to 5, and 0 to 10 **\$12.00**

POWER LEVEL INDICATORS

Power Level Indicators are used to measure sound or noise levels in amplifiers for Public Address, Theaters, Broadcasting Station Equipment, etc. The Decibel Meter permits the operator to make instant adjustments to prevent sound blasting or distortion. Standard range furnished reads up 6 and down 10 decibels, zero decibel at 1.73 volts, 500 ohm lines, 6 milliwatts. Standard damping.



Decibel Meter

No. 321DB—Up 6 down 10 Decibel Meter. Price..... **\$12.00**
No. 221DB—Up 6 down 10 Decibel Meter. Price..... **11.00**

DECIBEL METER KITS

To increase range of Power Level Indicators. Readings advance in steps of 4 decibels with constant impedance of 5,000 ohms—up to 22 decibels. Above 22 decibels the impedance is approximately 1,300 ohms resistance per volt. Triplett Decibel Meter Kits are supplied for either constant or non-constant impedance. 500-ohm input line. Using a Decibel Meter Kit facilitates immediate adjustments and the elimination of distortion.

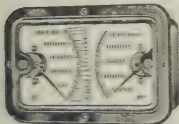
Model 150 Decibel Meter Kit—(Non-constant Impedance)—includes: Triplett Model 321 Decibel Meter, Selector Switch, 9 Wire-wound Multipliers on Molded Mounting Board, Hook-up Wire, Diagrams and Instructions.

Model 150 Decibel Meter Kit, complete. Price..... **\$21.67**
Model 200 Decibel Meter Kit—Constant Impedance (includes—same parts as Model 150 Kit, except it has Model 321 Constant Impedance Meter).

Model 200 Kit Meter has four studs allowing movement to be shunted without altering impedance over 50 ohms.

Model 200 Decibel Meter Kit, complete. Price..... **\$24.50**

TWIN INSTRUMENTS AND KIT



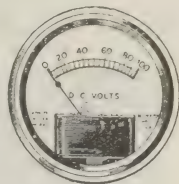
The Twin can be furnished in any combination of A. C. or D. C. instruments. The No. 1200 meter has the following scale readings: D. C. 10, 50, 250, 500, 1,000 volts at 2,000 ohms per volt; 1, 10, 50, 250 mills; 1,500 ohms, 1.5 and 3 megohms. A. C. 10, 50, 250, 500, 1,000 volts. Simultaneous readings on both instruments when connected in same or separate circuits. Used to balance

loads in 3-wire circuits, detect line fluctuations when load readings are taken, measure antenna and modulation current and similar applications.

No. 120—Twin Instrument.....	\$10.33
No. 1200—Kit, complete.....	16.67
No. 121—Special Selector Switch.....	1.67
No. 122—Shunt Board for 1, 10, 50, 250 M. A. readings; 1,500 ohms, 1.5 and 3 megohms; also series resistor for 1.5-ohm range.....	2.33
No. 123—Resistor Board for 10, 50, 250, 500, 1,000 D. C. volts and 50, 250, 500, 1,000 A. C. volts and current limiting resistors for 1.5 and 3 megohms.....	4.83

Ask us for the new complete Triplett Catalog

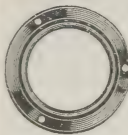
Readrite



We Carry a Very Complete Stock of
All Types of Readrite Meters

DC MILLIAMMETERS

No. 305—0 to 5... \$1.35	No. 391—0 to 150... \$0.60
No. 311—0 to 10... 1.20	No. 392—0 to 200... .60
No. 315—0 to 15... .60	No. 399—0 to 300... .60
No. 325—0 to 25... .60	No. 394—0 to 400... .60
No. 350—0 to 50... .60	No. 395—0-20-100... 1.20
No. 390—0 to 100... .60	No. 402—0-15-150... 1.20



No. 65A—Flange to use with Readrite Meters **\$0.09**

All Readrite DC Meters can be had with zero adjustment for \$0.15 extra.

DC VOLTMETERS

From 0 to 1 to	
0 to 50..... \$0.60	0 to 300..... \$1.95
0 to 100..... .90	0 to 500..... 2.10
0 to 150..... 1.05	0 to 750..... 3.30

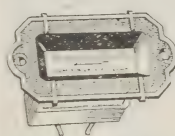
AC VOLTMETERS

0 to 4..... \$1.65	0 to 300..... \$3.30
0 to 6..... 1.65	0 to 600..... 3.90
0 to 10..... 1.65	0 to 750..... 4.60
0 to 15..... 1.65	0-10-140 2.70
0 to 150..... 2.10	0-150 Plug-in Type. 1.95

DC POCKET METERS

0 to 40 amps. \$0.60	0 to 50 volts... \$0.60
Comb. 0 to 50 volts and 0 to 40 amps.	.90

Readrite TUNING METERS



TM-108



TM-102



TM-103

Furnished in 0-5, 0-7, 0-10 and 0-15 M.A.

Tuning Meters. Any style..... **\$0.90**
Escutcheons **.18**

HOYT HOT-WIRE AMMETERS

For R. F. measurements. 3/4 in. diameter over-all, fits in 2 1/2-inch hole. Bakelite case. Has zero adjustment.

No. HM15. Price.....	\$3.55
No. HM3. Price.....	3.55
No. HM5. Price.....	3.55



CONTINENTAL METER MODERNIZER RESISTOR KIT AND SCALE

Use your own milliammeter—any 1 M. A. meter such as Weston 301, Jewell 54 or 88. Kit contains Continental Printed Paper Scales, a length of resistance wire to build up internal resistance of the meter to 50 ohms, and 9 Continental Carborite 5% Resistors with which to secure the following ranges at 1,000 ohms per volt: 500, 250, 100, 50, 25, 10, 5 volts; two ohm scales 0 to 1,000 and 0 to 1 meg. Complete instructions are included with each kit.

No. CVO Kit..... **\$2.16**

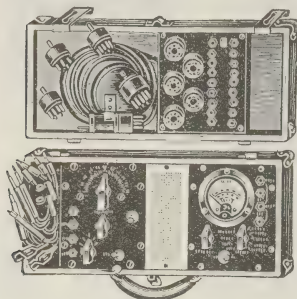


"NET PRICES"

RADIO'S SENSATIONAL VALUE QUALITY TESTING EQUIPMENT



NEW MODELS MORE FEATURES ACCURATE DEPENDABLE



**TRIPLET
NO. 1181A
IS A COMPLETE
TESTING
LABORATORY
FREE POINT TESTS
VOLTS, OHMS,
MILS., AC, DC, ALL-
WAVE OSC., OUT-
PUT METER,
TEST TUBES**

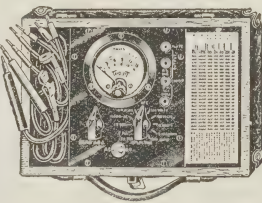
No. 1181A is the most complete of the 1100 series Triplet Testers. Combines the following instruments described below into one unit: No. 1151 All-Wave Oscillator, No. 1125 Universal Volt, Ohm, Milliammeter and No. 1166A Free-Point Auxiliary Set Tester. Read specifications of these instruments. In the No. 1181A they are all combined into unit—cased in a sturdy oak carrying case $16\frac{1}{2} \times 7\frac{1}{2} \times 4\frac{3}{4}$ inches. No. 1181A.....\$38.00

No. 1180—Combines Models 1125 and 1151 in a 1181A case. No. 1180.....\$30.00

No. 1167A—Combines Models 1125 and 1166A in 1181A case. No. 1167A.....\$25.00

UNIVERSAL VOLT, OHM, MILLIAMMETER

No. 1125 has $3\frac{1}{2}$ -inch, 500 microammeter, 16 different scale readings. 1,000 ohms per volt as either AC or DC volt meter. AC, DC volt readings are 0-15, 150-750; DC mil. readings are 0-1.5, 15-150; AC mil. readings are 0-15-150. Direct reading ohmmeter with red and black figures reads 0 to 1,500 ohms; 1.5 and 3 megohms. Has output meter connections. All readings controlled by selector switch. Furnished in oak case $11\frac{1}{2} \times 7\frac{1}{2} \times 4\frac{1}{2}$ ins. Batteries included \$20.00



ALL-WAVE OSCILLATOR NO. 1151

A completely shielded All-Wave Oscillator. Toggle switch controls the generation of either a stabilized modulated or unmodulated signal of constant level.

This All-Wave Oscillator is a signal generator covering frequencies from 110 KC to 18,000 KC.

A rotary switch provides for the selection of the four bands. Attenuator is especially designed for both weak and sensitive radio receivers.

Batteries are in a separate shielded compartment. Two small flashlight cells, one $22\frac{1}{2}$ volt block, and a '30 type tube are supplied. Case same as No. 1125.

Price.....\$23.33

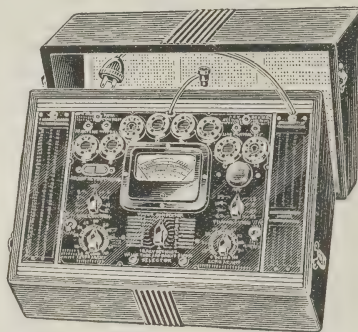
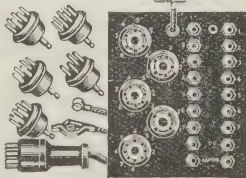
FREE-POINT AUXILIARY SET TESTER

NO. 1166A

No. 1166A brings all set socket connections to each of the various tube elements, through the attached cable and plug. Five sockets take care of all glass and metal tubes. Extra connections can easily be added, whenever necessary, at a very slight cost.

By this method, voltages, currents, resistances and continuities may be measured quickly and accurately without removing the chassis from the cabinet. Simplified chart supplied for each type of tube. Also, five plug adapters. Furnished in same case as Model 1125. No. 1166A.....\$10.67

Model 1166A (less case) furnished complete with hardware for mounting in large oak case cover to convert into 1181A Free-Point Test Sets. No. 1166A—LC (less case).....\$8.67



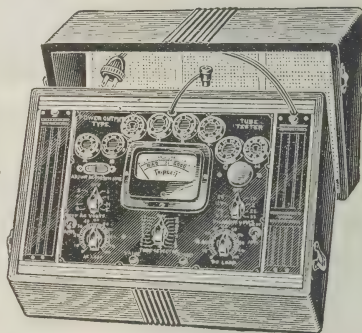
**NEW
POWER OUT-
PUT TUBE
TESTER WITH
NEON SHORT
TEST**

**"1936's Best
Tube Salesman"**

Model 1500 is the acknowledged last word type of tube tester. The gain method is used, showing the nearest approach to actual receiving set operation. Quickly tests all glass and metal tubes.

Applies proper D.C. voltages to tube elements. Includes A.C. test for rectifier tubes, and separate diode A.C. test. Supplies A.C. signal to C-G and indicates amplifications on the A.C. voltmeter. Neon short test detects even the slightest leakages. This new 1936 Triplet Model is a truly accurate, dependable tester of the type tube manufacturers use and recommend. Model 1500 is furnished in a very attractive 3-ply two-tone walnut case with sloping panels for portable or counter use. Case measures $15\frac{1}{4} \times 11\frac{1}{2} \times 7\frac{1}{2}$ inches. No. 1500.....\$36.67

**TRIPLET
ALL-PURPOSE
TUBE TESTER,
UNIVERSAL AC,
DC VOLT, OHM,
MILLIAMMETER
CONDENSER
TESTER, DECI-
BEL METER
AND IMPED-
ANCE METER**



Model 1501 multi-purpose tube tester has the most advanced circuit, (same as Model 1500) for giving the final answer to all tube tester problems. It combines in one instrument the equivalent of ten separate units—Tests tubes for their worth, Neon Short Test, Separate Diode Tests, Neon Paper Condenser Tests, Electrolytic Condenser Leakage Test, D.C. Voltmeter and Milliammeter, Ohmmeter, A.C. Voltmeter, Decibel Meter and Impedance Meter. Case same as No. 1501.

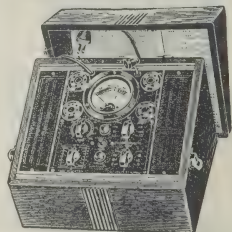
Will instantly reject any glass or metal tube which will not perform in a radio receiving set.

D.C. scale: 10-50-250-500-1,000 volts at 1,000 ohms per volt, 10-50-250 milliamperes, 1,000-10,000-100,000-1,000,000-10,000,000 ohms, 10-50-250-500-1,000 A.C. volts at 400 ohms per volt. Down 10 and up 15 decibels.

With the use of Model 1501 and Triplet's New Model 1231 or 1232 R.F. Oscillator, a serviceman would have a complete and perfect testing laboratory that would enable him to properly service even the toughest radio repair jobs in the quickest possible time. No. 1501.....\$46.67

Model 1310 is an improved emission-type tester. Accepts and rejects all glass or metal tubes according to their GOOD or BAD values. Simple to operate. The four controls are: Load, Tube Selection and Shorts, Line and Filament Voltages. Supplies separate diode test. Furnished in a beautiful modernistic two-tone walnut case with sloping panel, and metal tube reading charts. Case measures $11\frac{1}{2} \times 8\frac{1}{2} \times 8$ inches with removable cover for either portable or counter use.

No. 1310.....\$30.00



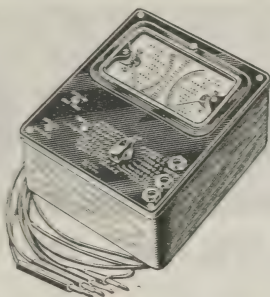
If you want more information on any test equipment shown in this catalog, please write for Factory Bulletins.

LEW BONN CO.

Is Test Equipment Headquarters in the Northwest!

"NET PRICES"

**NEW
NO. 1200 MASTER
UNIVERSAL
AC—DC
VOLT-OHM-MILLI-
AMMETER
with the
ANGLE-TILT
METERS
\$21.67**



Meter is a rectangular, double movement instrument having a DC movement with an accuracy of within 2% and a simplified AC movement with 2% accuracy. DC meter is rated 2,000 ohms per volt. Two jacks and the selector switch make available the following ranges:

0-10, 0-50, 0-250, 0-500 and 0-1,000 DC volts.
0-1, 0-10, 0-50 and 0-250 M. A.
Resistance values: 0-1,500, 0-1.5 megs. and 0.3 megs.
0-10, 0-50, 0-250, 0-500 and 0-1,000 AC volts.

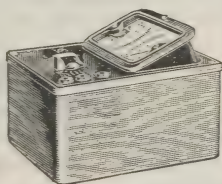
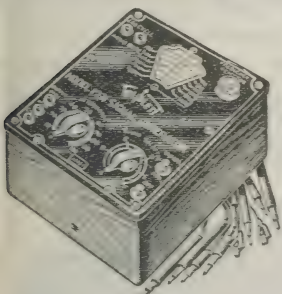
All readings are in direct figures—no trick arithmetic needed for quick readings.

Capacity charts are furnished for the AC scale.

Jacks provided for use of meter as an output meter. Comes complete with instructions, testing cords, guarantee, registration cards and batteries.

No. 1200—Without carrying case **\$21.67**

**NO. 1200
ILLUSTRATING THE
ANGLE-TILT FEATURE**



**MASTER FRE-
QUENCY STABILIZ-
ED, ALL-WAVE,
CONTINUOUSLY
VARIABLE SIGNAL
GENERATOR**

Model 1231 All-Wave Direct Reading DC Signal Generator is a 1936 addition to the popular Triplett Master Units. Has perfect attenuation. All frequencies are fundamentals, and fully stabilized. Extra long 12-inch vernier type direct reading scale, permitting extra fine readings for the 6 bands covering 100-30,000 Kc. Has 400 cycle audio signal available. Furnished in regular black Master Unit case, including necessary batteries and two type '30 tubes.

No. 1231—Price \$26.67

Model 1232 All-Wave Direct Reading AC Signal Generator Unit, (same as Model 1231, but for 110 volts—60 cycle AC operation).

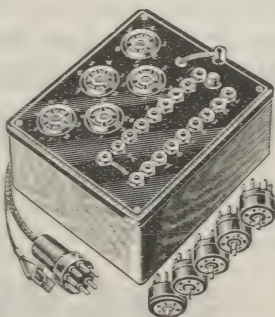
No. 1232—Price \$26.67

Model 1230 Unit is an All-Wave Signal Generator supplying a continuously variable signal. Frequencies are controlled on six fixed positions, from 100-18,000 Kc. Batteries, tubes and six individually calibrated graphs supplied.

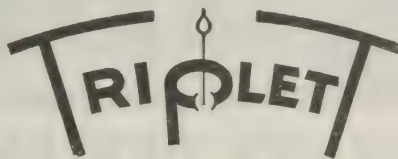
No. 1230—Price \$15.33

For servicing all sets using metal or glass tubes. Has five sockets—four with standard RMA markings, one new eight prong for metal tubes. Panel also includes eight automatic switch type and ten single action jacks. Makes all series and parallel meter connections through the set sockets to all parts of the circuit. Automatic in operation. Used in conjunction with Model 1200 Volt-Ohm-Milliammeter. A Free-Point tester for all present-day and future requirements. Extra connections can be added, when necessary, at a very slight cost.

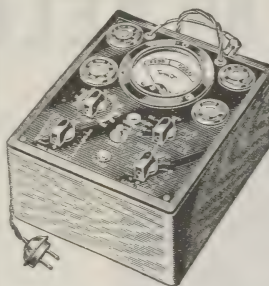
No. 1220-A—Unit. Price \$8.33



**New De Luxe MASTER
1200 Series**



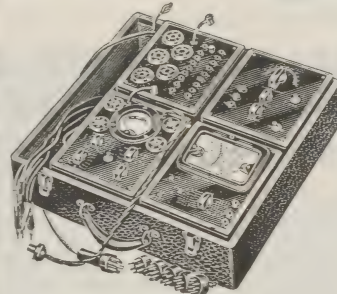
**The Modern Line of
Test Equipment**



**TRIPLETT'S
NEW 1200 SERIES
METAL AND GLASS
TUBES
TUBE TESTER
Large
English-Reading Meter**

Tests all types of tubes—both metal and glass. Direct reading. Colored GOOD and BAD scale. Large meter. Includes rectifier tube. Line voltage regulation. All short tests. Cathode leakage test. Individual tests on diodes and full wave rectifiers. Simple to operate. Only four sockets. Model No. 1210-A has a new and exclusive circuit approved by leading tube engineers, with every essential for a dependable emission test of tube values. No confusion, complications or calculations. A true test of good and bad conditions including the slightest leakages. 60 cycle, 100-130 volts.

No. 1210-A—Unit. Price \$20.00



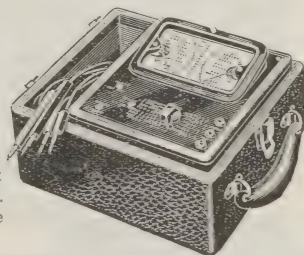
**NO. 1206
MASTER UNIT
COMPLETE
TEST
LABORATORY**

Contains No. 1200, No. 1210-A, No. 1220-A, No. 1231 all housed in No. 1204 carrying case.

No. 1206 \$82.67

**MASTER
UNIT CASES**

Strongly made with black grained leatherette covering. Individual compartments are lined with soft, green felt.



No. 1201—Case only, for single Master Unit. Price.....\$4.00

No. 1202—Case only, for two Master Units. Price..... 4.67

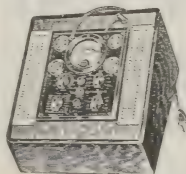
No. 1203—Case only, for three Master Units. Price..... 5.33

No. 1204—Case only, for Master Test Set. Price..... 6.00

**TRIPLETT 1211A COUNTER
TUBE TESTER CASE**

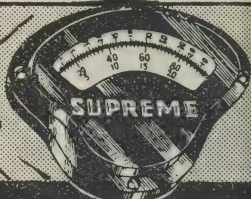
This quartered oak case is especially for Model 1210-A Tube Tester. Metal tube readings charts are fastened to sloping panels. Size 12x11½x6½x3¼ inches.

No. 1211-A—Case only\$4.00



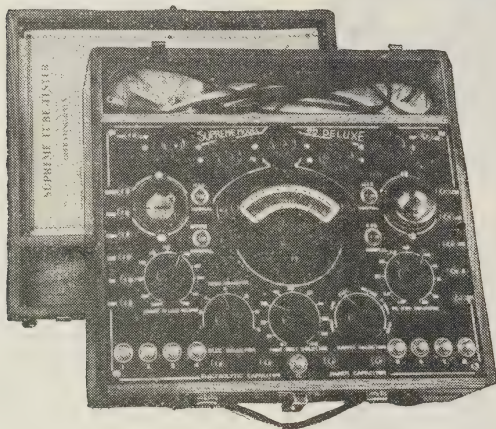
"NET PRICES"

Supreme



STARTLING NEW ENGINEERING DEVELOPMENTS

Supreme's New 6 in 1 Instrument SUPREME 89 DELUXE TUBE TESTER



The Supreme 89 DeLuxe Tube Tester is as sensational as the new all-metal tubes, only it contains a lot more features than the facilities for testing all the new all-metal tubes, including 8-prong types. It is really 6 instruments in 1, offering the following features: (1) An improved quality tester (English reading scale) on all tubes without adapters. New switch arrangement with Supreme's exclusive Uni-construction, assuring greater accuracy by testing all tubes under their approximate rated loads. (2) The famous Supreme Neon Leakage test for indicating leakages between all elements of all tubes. (3) Neon condenser tester for indicating leakages and short circuited conditions. (4) English reading condenser tester, accurately and positively classifying all electrolytics directly on the scale in terms of "good" or "bad." (5) D.C. voltmeter with external ranges of 0/5/125/500/1,250 volts. (6) Point-to-point resistance tester with ranges of 0/2,000/20,000/200,000 ohms and megohmmeter with ranges of 0/2/20 megs. All ohms and megohms ranges operated from self-contained power supply.

In handsome Quartered Oak carrying case with tube chart mounted in the cover.

\$45.95

(See page 37 for important announcement!)

A SUPER ANALYZER WITH DIRECT RESISTANCE RANGES UP TO 20 MEGS WITH SELF-CONTAINED POWER SUPPLY

Supreme 339 DeLuxe Analyzer

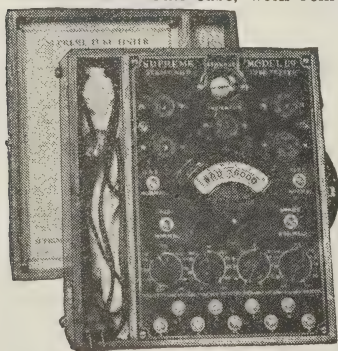
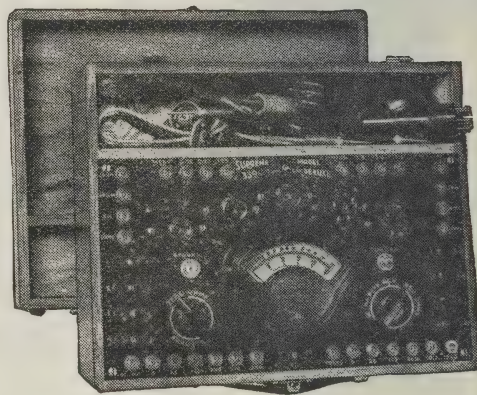
The Supreme 339 DeLuxe Analyzer is unquestionably the finest constructed instrument, both from the standpoint of quality of materials and engineering skill, in instruments selling for less than \$75.00. The 339 DeLuxe virtually spreads the entire circuit of the set out on your analyzer panel like a diagram. Is a combination point-to-point tester and analyzer, providing complete resistance, voltage and current analysis and tube testing direct from a radio socket, with self-contained power supply. Tests all tubes, including all new all-metal types with as many as 8 pins. Supreme's latest 5-inch fan-type, easy reading meter. All meter ranges, including resistance and output measurements, are applied through the analyzer cable making it unnecessary to remove the chassis from the cabinet. All current and voltage tests are fundamental and will not become obsolete.

The exclusive Supreme Free Reference Point System is used in which the chassis, or any tube element may be used as a reference point for all meter tests. A plug and cable are provided, with adapters, for plugging into any tube socket for test. Circuits are extended for complete external test.

Six output ranges; D.C. M.A. ranges of 0/5/25/125/250/500/1,250 M.A.; A.C. and D.C. ranges of 0/5/25/125/250/500/1,250 volts; capacity ranges of 0/0.05/0.25/1.25/2.5/5.0/12.5; resistance ranges of 0/2,000/20,000/200,000 ohms and 0/2/20 megs.

In a beautiful Oak case, with removable lid.

\$39.95



A New Tube Tester at a New Low Price Featuring Supreme's FAMOUS NEONIZED LEAKAGE TEST

SUPREME 89 STANDARD TUBE TESTER

Features Supreme's new 5-inch full-vision, easy-to-read meter, testing all tubes, including all the new all-metal types, without adapters, in terms of "good" and "bad" and giving the double checking of the famous Supreme Neonized Leakage test between all elements of tubes. Line voltage 98 to 125 volts. New circuit testing all tubes at their rated load. Will detect faulty tubes testing O.K. the old way and soon pay for itself in extra tube sales.

\$34.95

"NET PRICES"

1936 INSTRUMENTS

A NEW LOW LEVEL OF PRICES

Automatic Speed and Flexibility

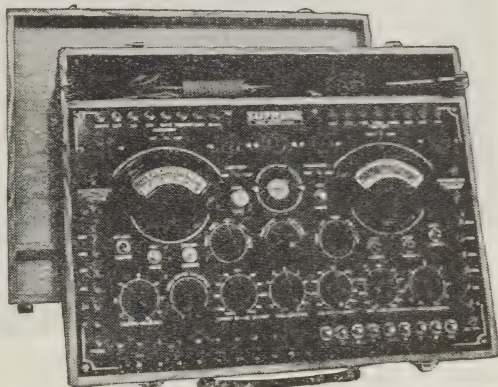
SUPREME 385 AUTOMATIC

Featuring Exclusive Supreme Uni-Construction

"Uni-Construction" is the engineering of a multiplicity of instruments in one compact unit; utilizing component parts of one tester in the circuits of another to add many testing functions otherwise not available, and at the same time effect economies in production which result in a lower net cost to the serviceman or dealer.

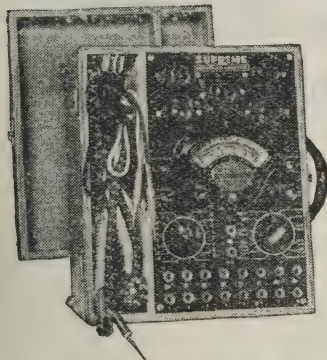
The Supreme 385 Automatic is a combination of the many popular features of the famous 339 DeLuxe Analyzer and the 89 DeLuxe Tube Tester. It has: (1) Three ohmmeters; one with a low range of 0/200 ohms, another with intermediate ranges of 0/2,000/20,000/200,000 ohms, and the third with high ranges of 0/2,000,000/20,000,000 ohms, all from self-contained power supply. (2) A complete Free Reference Point Analyzer with ranges of 0/5/25/125/250/500/1,250 D.C. mls, and 0/5/25/125/250/500/1,250 A.C. or D.C. volts; all ranges also externally available for point-to-point tests. (3) Three capacity testers; one with six ranges directly read on the meter scale of 0/0.05/0.25/1.25/2.5/5.0/12.5 mfd's, accommodating both paper and electrolytic condensers, another for non-electrolytics indicating leakages, opens, and shorts, and the third for electrolytic types is the first English reading condenser tester, showing the true condition of all condensers directly on a "good-bad" meter scale. (4) An A.C. English reading tube tester—a new instrument offering for the first time a quality test of all tubes at approximately their rated load which is the only test recognized by tube manufacturers. (5) The already famous Neon Leakage test between all elements of all tubes, and (6) It was the first tester designed to completely accommodate the new all-metal tubes, having up to 8 prongs at the base, in all its analytical and tube test functions.

Its speed and simplicity give it its name, so quickly and automatically does it give the test. Yet it is most compact, measuring only 4"x13"x16" inches. It is radio's finest and most complete servicing instrument, yet amazingly low in price for such equipment. Price..... **\$77.95**



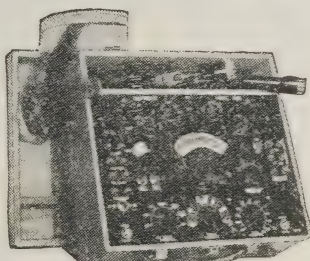
A KNOCKOUT VALUE SUPREME 339

Standard Analyzer



**FREE REFERENCE
POINT ANALYZER**

The 339 Supreme Standard is easily the biggest value in the low price analyzer field. Supreme's standards of construction throughout. All meter ranges are selected by a single 12 point rotary switch. Meter ranges are 0/5/125/500/1,250 volts A.C. or D.C., 0/5/125 M.A.-D.C., and 0/2,000/200,000 ohms. Large figures are used on the "ohms" scale for easy readability. The lowest reading is 1 ohm, with 35 ohms in center of scale. Includes complete accessories, instruction manual, a new tube base selector and Free Reference Point System of Analysis Chart. Price..... **\$29.95**

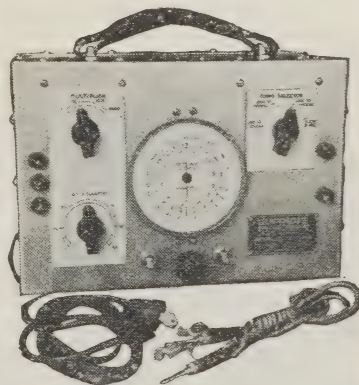


Opens the Profitable Motion Picture and Sound Equipment Field for the Radio-men.

Supreme 391 P. A. Analyzer

The 391 is specifically designed from experience to equip the radio-man to cash in on the constantly growing opportunities for service in sound equipment of every character. Here are some of the facilities of the 391 in servicing sound equipment and public address systems: (1) Measurement of direct currents, from photo-cell circuits to exciter lamp currents. (2) Measurement of direct and alternating current voltages from tube biases to high voltage rectifier windings. (3) Determining of effective resistances from speaker voice coil windings to grid leaks and plate coupling resistors. (4) Measurement of capacities from small grid couplers to large by-pass and filter condensers of both electrolytic and non-electrolytic types. (5) Direct reading of the level of audio currents and voltages in their decibel relations to the accepted reference level. Single D.C. meter with associated rectifier. Six A.C. and D.C. voltage ranges to 1,250 volts. Direct currents of 0/250 microamperes, six milliamperes ranges to 500 mls, three ampere ranges to 12.5 amps. Ten capacity ranges to 50 mfd's. Six resistance ranges to 50 megohms with self-contained power. Decibel ranges (0 Level—6 milliwatts in 500 ohm line) —10 db. to +20 db. and +5 db. to +35 db. Price..... **\$69.95**

New 3-Tube Supreme 189 Signal Generator 4 Controls



Uses an electron-coupled circuit, offering excellent dynamic stability. 90 kilocycles to 30 megacycles, individually calibrated with guaranteed accuracy of 1/2 of 1%. Four controls; range selector, 4-inch airplane direct reading dial with 10 to 1 ratio and ladder attenuator, consisting of one multiplier switch and a variable control approximately calibrated in microvolts. Self-contained 400 cycle oscillator, capable of modulating radio frequency carrier 50%. Completely shielded and supply line adequately filtered. Uses three tubes; one type 35 and two type 37's. For 110-volt 60-cycle operation. Price..... **\$36.95**

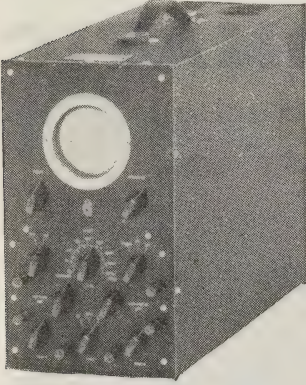
IMPORTANT—READ THIS!
NEW F. H. A. FINANCE PLAN
on the purchase of Test Equipment.
See page 37 for details.

"NET PRICES"

U. S. E. and RCA TEST EQUIPMENT

U. S. E.

CATHODE RAY OSCILLOGRAPH



As an instrument for use in analysis of A.F. and R.F. circuits the Cathode Ray Oscilloscope is the outstanding modern development. Indispensable in laboratory, factory production, classroom, service and transmitter work. The CR-3 lends itself to a wide variety of specific applications obvious to anyone acquainted with the fundamentals of the Cathode Ray tube after examining the following specifications. Instruction notes are supplied with the CR-3 covering general applications, and also specific applications with the U. S. E. Type CR-4 R.F. Audio Osc. and Type CR-5 Freq. Mod. R.F. Osc. for use in radio receiver analysis.

SPECIFICATIONS

FOCUS—Control on panel to focus beam on screen.

ILLUMINATION INTENSITY—Sufficient to view the trace in a well-lighted room or to photograph. Intensity controlled from front panel.

VERTICAL AMPLIFIER—Provided to increase sensitivity of the instrument. A control varies the gain on this amplifier and a switch is provided to connect it between the vertical plates and the binding posts on the panel. Amplifier gain is approximately 40 and is practically linear from 15 to 100,000 CPS, being down about 20 db. at 300 K. C.

SWEEP OSCILLATOR—A linear time base is provided for viewing recurrent wave forms. This is in the form of a timing oscillator having a saw-tooth wave form. Frequency is continuously variable from 15 to 20,000 CPS. This frequency range is divided into eight logarithmically spaced ranges. The oscillator may be set to any one of these ranges by means of a switch on the panel.

A control on the panel varies the frequency continuously between the extremes of each range. A locking circuit is provided to allow the image to be locked in step with some sub-multiple of the voltage under test. Control is provided to vary the voltage supplied Type CR-3 Oscilloscope.

Complete with RCA Tubes. Price

to the locking circuit. Binding posts are provided to connect an external synchronizing or locking voltage. A switch is provided to select either internal, external or 60 cycle synchronization.

HORIZONTAL AMPLIFIER—Having characteristics identical to vertical amplifier, is provided for connection between the horizontal set of deflection plates and the sweep oscillator or the external binding posts.

SENSITIVITY—With amplifier connected and gain on full the oscilloscope has a guaranteed sensitivity of 0.75 volts R.M.S. per inch of deflection. Without the amplifier the oscilloscope has a guaranteed sensitivity of 30 volts R.M.S. per inch of deflection.

CENTERING ADJUSTMENT—Screw-driver adjustments are provided for centering the beam on the screen vertically and horizontally.

POWER SUPPLY—Complete A. C. operation from 110-120 volts; power consumption 50 watts.

TUBES—One RCA 906 or 908, one RCA 879, one RCA 885, two RCA 57, one RCA 80.

SIZE—Overall: Height, 13 in.; width, 7 1/2 in.; length, 18 in.

WEIGHT—31 lbs. net.

\$84.50

U. S. E. FREQUENCY-MODULATED R. F. OSCILLATOR

The CR-5 Frequency-Modulated R.F. Oscillator not only incorporates all features of any value offered in other similar instruments but also incorporates valuable features not available at this time in any other commercial unit.

Selective single or double trace.

20 K. C. frequency modulation with one oscillator, eliminating hum and difference frequencies.

Ball bearings on all rotating parts, insuring vibrationless trouble-free operation.

"Band" Frequency modulation for tracking oscillator circuits in superheterodynes.

Sine wave audio oscillator for amplitude modulation, 400 cycles.

Amplitude modulation control.

Type CR-5 Frequency-Modulated R.F. Oscillator.

Complete with RCA Tubes. Price

Built-in impulse generator, insuring "image" synchronization.

Matched-unit construction.

R. F. OSC. RANGE—Continuously variable from 100 K. C. to 25 M. C. on six bands, individually calibrated.

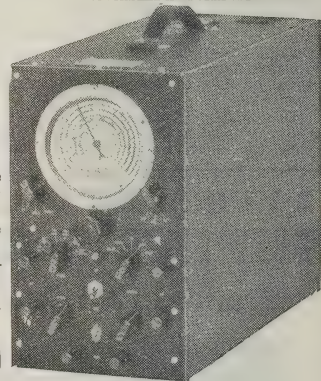
TUBES—One RCA 84, one RCA 6D6, one RCA 76.

POWER—110-120 volts, 60 cycles; power consumption 60 watts.

SIZE—18 in. long, 7 1/2 in. wide, 13 in. high.

WEIGHT—13 lbs.

\$85.00



U. S. E. BEAT FREQUENCY AUDIO OSCILLATOR

GENERAL FIELD OF USE

Educational Laboratories.

Manufacturers and installation engineers in acoustic materials and sound equipment.

Organizations selling audio apparatus—to make comparative demonstrations.

SPECIFICATIONS

FREQUENCY RANGE—The unit is calibrated from 10 cycles to 20,000 cycles and it will deliver power at slightly higher and lower frequencies.

FREQUENCY CONTROL—The main tuning dial is calibrated at least every 10 cycle interval up to 200 cycles, and at least every 100 cycle interval from 200 cycles to 2,000 cycles, and at least every 1,000 cycle interval from 200 cycles to 20,000 cycles. The total scale length is approximately 9 inches.

FREQUENCY CALIBRATION—The main tuning scale calibration may be relied upon to within 2% when the oscillator has been adjusted to read frequency at the calibration point on the main tuning control.

Type CR-4 Audio Oscillator.

Complete with RCA Tubes. Price

OUTPUT—Two output circuits are provided, one for loads above 10,000 ohms, and one for loads above 500 ohms.

WAVE FORM—At frequencies above 100 cycles the total harmonics are less than 5% of the fundamental.

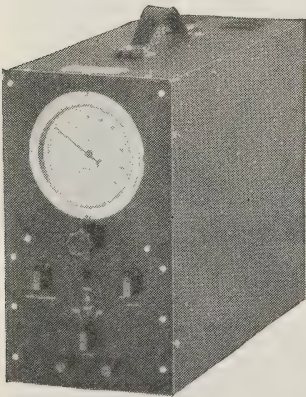
POWER SUPPLY—Completely A.C. operated, 110-120 volts, 60 cycles. Power consumption approximately 35 watts.

TUBES—Three RCA 76, one RCA 42, one RCA 6C6, one RCA 84.

DIMENSIONS—Overall height, 13 inches; width, 7 1/2 inches; depth, 18 inches.

WEIGHT—Net 31 lbs.

\$69.00



RCA FREQUENCY MODULATOR

Sweeps the output R. F. voltage of your Test Oscillator over resonant frequency of circuit under test and creates an A. C. synchronizing voltage. Two cycle frequency per revolution provides accurate double sweep alignment. Repulsion induction motor of 1,550 r. p. m. Provided with a 14 in. low capacity shielded cable with jack plugs at each end for connection between modulator and oscillator. Comes in heavy gauge black crackle finish. Aluminum case, size 9 3/4 x 8 1/2 x 4 1/2 in.

No. 9558.....**\$27.50**
MODERNIZATION KIT, for previous models (TMV97A or 97B), RCA oscillators.

No. 9559.....**\$4.75**

RCA OUTPUT INDICATOR

An inexpensive dependable instrument that takes the guesswork out of peaking receivers. Consists of a tapped step-up transformer, a potentiometer, a neon glow tube and three binding posts mounted in a small bakelite case, size 5 3/4 x 2 3/4 x 2 3/4 in. When used in connection with an oscillator, the glow tube will glow brightest when resonance is reached in aligning receivers. Input impedances are 0.6 ohm, 1.5 ohm, and 40 ohms.

No. 4317.....**\$4.00**



"STAR LINES" OF RADIO TEST EQUIPMENT

Readrite

DIRECT READING TUBE TESTERS

Checks all glass and metal tubes. Applies proper load values to tube being checked. Tests for leakages and shorts. Only four simple operations required. Uses Triplet Model 221 Meter with good-bad scale. Meter protected against damage. Shadow type A.C. meter for line voltage, adjustment. Sloping, all metal, silver and black panel. Quartered oak case—size $8\frac{1}{2} \times 8 \times 6\frac{1}{2}$ inches.

No. R430\$18.00

No. R431—Same as No. R430 but with Readrite Meter having good-bad scale 14.40



POINT-TO-POINT TESTERS

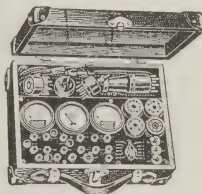
Model 720A is designed for speedy, efficient servicing on all radios including metal tube sets. Used to measure resistances, continuity, capacity and voltages and tubes. Has 8 wire cable which plugs into set sockets. Includes two meters—D.C. having scales—15-150-300-600 volts; 15-150 M.A. A.C. meter reads—0-10-25-150-750 volts. Complete with instructions, charts and accessories.

No. R720A\$15.00

No. R7350A—Same as No. R720A but with Triplet Model 223 D.C. voltmeter having 1,000 ohms per volt and scale reading 15-150-300-600 volts.....\$18.60

SET TESTER

Model 710A—popular three-meter set tester is used to check all parts of radio tube circuits by plugging directly into receiving set socket on all sets including 8 octal metal tube models. D.C. voltmeter reads 0-20-60-300-600; D.C. milliammeter reads 0-15-150; A.C. voltmeter reads 0-10-140-700. Selector switch connects all D.C. circuits to D.C. voltmeter. Panel jacks provide individual range connections for the three meters. Black and silver panel in black leatherette case—size $10\frac{1}{2} \times 8\frac{1}{2} \times 4$ inches. Comes complete with instructions, resistance and capacity charts and necessary accessories.



No. R710A\$16.50

No. R712A—Same as No. R710A but with Triplet Model 233 D.C. Voltmeter, 1,000 ohms per volt, reading 0-15-60-300-600\$22.20

ALL-WAVE SIGNAL GENERATOR

Model 554 incorporates all latest improvements. Uses special plug-in coils for each of the present five frequency bands covering 100 to 20,000 K.C. (Merely adding a new coil will provide for any new frequency range.) Has extra long dial. Large calibration curves supplied for each freq. band. Self-contained batteries and two 30 tubes. Black leatherette covered case—size $12 \times 6\frac{1}{2} \times 5\frac{1}{2}$ inches. Readrite Portable Output Meter can be used

with this oscillator but not included.

No. R554A—Complete\$14.40

READRITE OHM—CAPACITY AND OUTPUT METERS

Portable Type

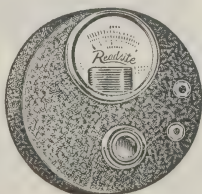
No. R500—Ohmmeter—2 scales, 0-1,000, 0-10,000 ohms. Self-contained battery. Zero adjustment\$3.90

No. R505—With Triplet 223 meter reading to 50,000 ohms.....\$7.95

No. R501—Resistance meter same as in No. R500 but no case, batteries or resistors\$1.65

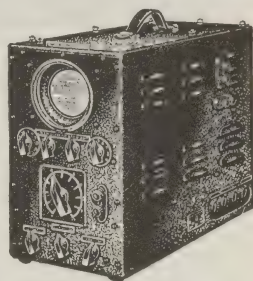
No. R800—Capacity Meter—A.C. Meter reads directly in Mfd's. .008 to 10. Includes charts for reading inductance and resistance values. Complete.....\$5.25

No. R575—Output Meter—Includes D.C. Voltmeter with full-wave copper oxide rectifier. Complete.....\$4.95



MODEL CRA CATHODE RAY OSCILLOGRAPH

The new, up-to-date method of radio servicing. Especially useful in measuring hum and distortion in all types of radio apparatus. Permits visual alignment of all R.F. and I.F. circuits. Combines an oscillograph, amplifier and linear sweep circuit in one compact portable unit. Sweep rate adjustable from 15 to 16,000 cycles. Will give one-inch vertical deflection with only .4 R.M.S. Signal input. Has synchronizing circuit for producing steady images on cathode ray screen. Control housed in a black crackle metal case with convenient leather carrying handle. Size: $13\frac{1}{2} \times 8\frac{3}{4} \times 18$ inches. Operates entirely from 110 volt 60 cycle A.C. current. Supplied with tubes, calibration screen and instruction manual.



Model CRA\$84.50

Model CRB—Similar to Model CRA except no linear sweep circuit is provided. The linear sweep is not needed to align R.F. and I.F. circuits when oscilloscope is used with Model OM Oscillator. Complete\$69.60

CLOUGH-BRENGLE ALL-WAVE OSCILLATORS

Complete self-contained signal generators which provide every intermediate, broadcast, and short wave frequency on fundamental signals for all alignment purposes. Six bands cover 50-30,000 K.C. (6,000-10 meters). Each band is covered by a dial 25 inches long with 400 divisions. Readings are accurate to 1/10 of 1%. Has electron-coupled oscillator with a separate 400 cycle audio modulator. Output is continuously variable from $\frac{1}{2}$ MV. to 2 volts. Two models are available.

Housed in compact metal case, $10\frac{1}{2} \times 7\frac{1}{2} \times 5\frac{1}{2}$ inches.

MODEL OC—FOR AC-DC 110 VOLTS

The Clough-Brengle Signal Generator as described above, for 110 Volt A.C. or D.C. operation. Complete with tubes, cords, and instructions. Price.....\$34.80

MODEL OM. Similar to Model OC, but with the addition of a beat-note frequency modulation circuit, necessary for producing selectivity-sensitivity curves when used with Cathode-ray Oscillographs. Frequency swings plus and minus 15 K.C. Complete with tubes, cords, and instructions. Price.....\$57.75

CATHODE-RAY TESTING AND ANALYSIS BOOKLET

An interesting and valuable treatise on the application of Cathode-ray equipment in receiver, amplifier and transmitter testing. Given FREE with purchase of any C-B instrument. Net\$0.25

FIXED-SWEEP FREQUENCY MODULATOR

Brings all advantages of the Model OM to owners of Model OC or other R.F. Oscillators. Heterodynes the output of the oscillator to a fixed-sweep frequency modulated oscillator giving + and - 15 K.C. sweep for use with any standard oscillograph.

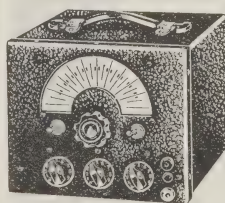


Model 81.....\$34.25

DIRECT-READING ALL-WAVE OSCILLATOR

85 K.C. to 21,000 K.C. continuously variable on fundamentals with $8\frac{1}{2}$ -inch open face type dial. Battery operated, two tubes, ladder type attenuator. Size $10 \times 7\frac{1}{2} \times 6\frac{1}{2}$ inches. Comes with leads and tubes but no batteries.

No. C82.....\$19.90



CLOUGH-BRENGLE BEAT FREQUENCY AUDIO OSCILLATOR

Calibrated 50 to 10,000 cycles direct reading. Built-in power supply, distortion less than 5%, output uniform over entire range. 27 volts output. Vacuum-tube voltmeter circuit built in to indicate zero-beat. 5-76's and 1-80 used. Size $8\frac{1}{2} \times 12\frac{1}{2} \times 9\frac{1}{2}$ inches.

Model 79—Complete\$51.90

CLOUGH-BRENGLE VACUUM TUBE VOLTMETER

Three ranges—0-3½, 0-17½, 0-70 volts. Used in measuring amplification of R.F. and A.F. circuits, impedance of trans., chokes, voice coils, etc., hum level voltages, noise level voltages and many other difficult tests. Complete with tubes and full instructions.

Model UC\$34.80

"NET PRICES"

"STAR LINES" OF RADIO TEST EQUIPMENT

The 1936 DEPENDABLE Line NEW 1936 DEPENDABLE MODEL 305C TUBE, CONDENSER AND OHM TESTER

5-in. English-reading fan-type bakelite case meter. Sloping panel. Neon short test. Line voltage meter. Tests diode, triode, pentode, etc., sections of combination type tubes. Ohmmeter and continuity tester included. Tests every type of receiving tube made today—provides for future use. Tests shorts and leakages—all elements tested. Neon light indicates leakages above 500,000 ohms—also used in testing condensers. Line voltage control and meter. Provides against obsolescence. Spare switching capacity for 200 more tubes. Resistances can be accurately measured from 10 ohms to 1 megohm. No batteries required. D'Arsonval moving coil meter—accurate within 2%.

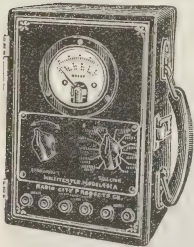
No. 305C—Complete	\$21.95
No. 305KP—Same in Kit form	17.65
No. 305P—In combination portable-counter case. Removable hinged cover. With compartment for tools, etc. Weather-proof	\$24.50
No. 305KP—Portable model in Kit form	19.85



MODERNIZE YOUR DEPENDABLE NO. 304

SVC.1—New 8-7 adapter, insulated double control grid cap connector and lead, and new tube chart.....\$0.75
SVC.2—New combination 7 large and small prong socket, new 3 octal socket, new ins. double C. G. cap and lead, wiring instructions and new tube chart.....\$0.50

DEPENDABLE MULTITESTER 2,000 Ohms Per Volt—12 Scales—Ohmmeter Milliammeter—A.C.-D.C. Voltmeter



Ranges: ohms—0-2,000, 0-200,000, 0-2,000,000; zero adjustment; D.C. volts—0-50-250-750; A.C. volts—0-5-750; M.A.—0-5-50-250. D'Arsonval meter 3 1/2-inch bakelite cased. Uses full-wave copper oxide (bridge type) rectifier. Automatic selector switch instantly connects the meter to desired circuit and range. Accuracy of meter, multipliers and shunts —2%.

No. 406—6x8 1/2 x 3 1/2-in. leatherette case with illuminated test prods.	\$19.95
No. 406A—In portable case with hinged cover	\$21.50
No. 406K—In Kit form—less batteries	\$14.65

DEPENDABLE ANALYZER UNIT

Free Reference Point Tester

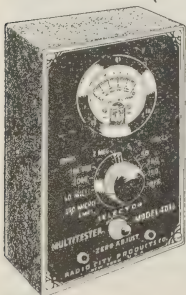
Tests can be made between any two elements, or chassis or ground. Automatic selector switches connect all circuits instantly. No jumpers, plugs or jacks. Has 10 wire analyzer cable. On panel 5 1/2 x 3 inches. Includes 5 adapters. For use on all tubes up to and including 8 octal tubes. No. 502.....\$6.85
No. 502A—Mounted in counter case.....7.95
No. 502B—In hinged cover portable case... 8.95



DEPENDABLE MULTITESTER

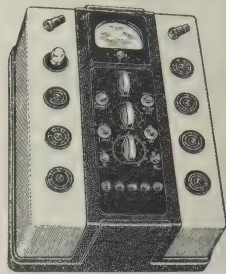
2,000 ohms per volt—microammeter—milliammeter—ohmmeter—voltmeter ranges; volts—0-5, 0-50, 0-250, 0-750; ohms—0-2,000, 0-200,000, 0-2,000,000; M.A.—0-50; microamps—0-500. 3 1/2-inch D'Arsonval meter has 2% accuracy. Has selector switch with durable contacts. A tapered rheostat insures smooth zero adjustment on all ohmmeter ranges. Comes complete with batteries in a neat leatherette case—5x8x3 inches.

No. 403A.....	\$13.95
No. 403AK—In Kit form—less batteries	\$10.65

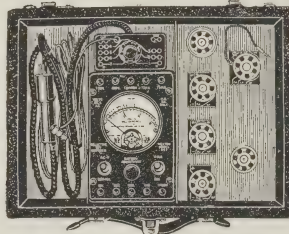


WESTON MODEL 770 Portable or Counter TUBECHECKER

Tests all types of present-day receiving tubes. Housed in a beautiful cream and black crackle finished, aluminum case. Visual line voltage check. Will test 6P7 tube without adapters. The Model 770 will take care of all new tubes now announced regardless of filament pin position. A Neon bulb indicates shorts quickly. Instruction cards tell how to use tester for condenser leakage tests. Size 1 1/2 x 9 1/4 x 6 inches. Weight 8 lbs. No. 770.....\$39.75
No. 770C—Carrying case.....4.50



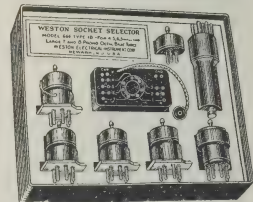
WESTON MODEL 698 SELECTIVE SET SERVICER Type 1-B



D.C., 500,000-5,000 ohms full scale, and 75-7.5 milliamperes D.C. only. Voltage, current, resistance and continuity measurements may be made in any radio receiver.

Model 698 Type 1-B (Complete).....\$37.50

MODEL 666 SOCKET SELECTORS



Model 666 Type 1-B consists of a tester plug with a 4-foot cable wired to a small 7-prong tube socket block. The socket terminals are connected as shown by white tracer lines to pin jacks on either end of the block; jacks are also provided for the cap and ground lead connection. Differently colored adapters are provided for 4, 5, 6, large 7 and 8-prong octal base tubes. The selector block mounts mechanically on the analyzer by means of two pin terminals. With the tester plug inserted in the socket and the tube in the Selector Socket, tube circuit conditions can be checked by plugging cables from jacks on selector block to the analyzer jacks or binding posts. The pin jacks are marked with the new RMA tube base numbering system and a tube base chart is furnished. For those who have a Model 666 Type 1-A Socket Selector there is available a set of Model 666 Type 3-A octal accessories. This set of accessories together with Model 666 Type 1-A provides the same service as the complete Type 1-B Socket Selector.

Model 666 Type 1-B (for 4, 5, 6, small and large 7-prong and 8-prong octal base tubes).....	\$14.25
Model 666 Type 3-A Kit for 8-prong octal base tubes....	3.37
Model 666 Type 2 Capacity Unit.....	7.87
Jumper Cables, No. D-71785-6, per pair.....	.56
Ground Lead, No. D-71787, each.....	.38
Output Meter Lead, No. D-73063, each.....	.38
Test Leads, elbow terminals D-70033-4, per pair.....	.95

MODEL 665 SELECTIVE ANALYZERS

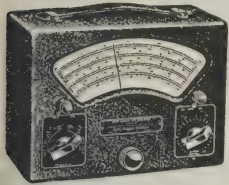


The Model 665 is available in two types. Type 2, the "Pin Jack Model," and Type 1, the "Rotary Switch Model." The Rotary Switch is incorporated in Type 1 for a more rapid selection of ranges. The Model 666 Type 1-B Socket Selector, which serves to bring the tube socket connections to the analyzer circuit, or the Model 666 Type 2 Capacity Unit, may be mounted on either analyzer. Both Model 665 Analyzers have the following voltage ranges: volts A.C.—D.C., 1,000-500-250-100-50-25-10-5-2.5-1, sensitivity of 1,000 ohms per volt. The D.C. current ranges of the Type 1 Analyzer are 500-250-100-50-25-10-5-2.5-1 milliamperes. The D.C. current ranges of the Type 2 Analyzer are the same except that measurements may be taken up to 1,000 milliamperes. Resistance 1 ohm to 1 megohm.

The assembly is supplied in a sturdy pressed steel case attractively finished in black. A leatherette covered carrying case can be provided to accommodate the Model 665 Analyzer, (Type 1 or Type 2), and a Model 666 1-B Socket Selector. Model 665 Type 1 (less carrying case and Model 666 Socket Selector).....\$52.50
Model 665 Type 2 (less carrying case and Model 666 Socket Selector).....\$48.75
Carrying Case.....3.75

"STAR LINES" OF RADIO TEST EQUIPMENT

THE 1936 WEBBER OSCILLATOR Pioneer of Full Vision Dials

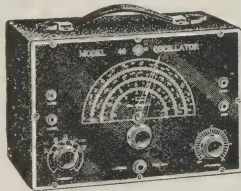


Covers all frequencies from 90 K. C. to 25,000 K. C.—no skips. All on fundamental frequencies. Calibrations are guaranteed $\frac{1}{2}$ of 1% throughout intermediate frequency ranges. Perfected attenuator switch. 400-cycle note—approximately 35% modulated. Audio frequency signal available. One-piece cast aluminum case. Uses one $\frac{1}{2}$ -volt and one $2\frac{1}{2}$ -volt batteries and two 30 tubes. Size $6\frac{1}{2} \times 9 \times 4\frac{1}{2}$ inches.

No. 20—Webber Oscillator, less batteries\$29.95

WEBBER MODEL 40 OSCILLATOR

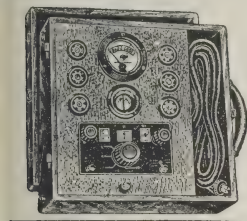
Frequency range continuously variable from 90 K. C. to 60 Megacycles on fundamental frequencies—not harmonics. Calibrations $\frac{1}{2}$ of 1% accurate. Direct reading dial etched on panel. Jack on front permits use of cathode ray modulator unit. Audio signal is approximately 400 cycles and is available at panel jack. Uses same battery and tube arrangement as Model 20. Size $10\frac{1}{2} \times 6\frac{1}{2} \times 5\frac{1}{2}$ inches.



No. 40—Webber Oscillator, less batteries.....\$24.95
No. 40A—Same features except calibrations 3% accurate 19.50

WEBBER NEON-GLO MODEL 30 TUBE TESTER

A modern tester that is leading the sales parade. Features new, simplified Neon hot short and leakage tests and new Neon condenser testing features. Illuminated control panel. Gives two separate tests—one for shorts and one for quality. English-reading. Quartered oak portable case, size $13 \times 12 \times 5\frac{1}{2}$ inches. No. 30—Webber Tube Tester complete\$34.95

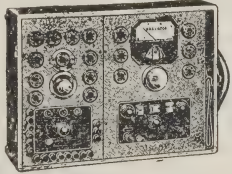


WEBBER 30-31 RADIO SERVICER

Tests Tubes, Auto Vibrators, Condensers, Volts, Ohms and Milliamperes

- Makes a complete factory test on all types vibrators. Accurately indicates shorts, "A" battery drain, output and has a complete "hash" and condenser test and indicates condition on English-reading scale.
- Volt-ohm-milliammeter with sensitivity of 1,000 ohms per volt and a self-contained power pack. Voltmeter ranges of 0, 10, 500. Current range 0-50 M. A. and 0-10 amperes. Ohmmeter ranges 0-500, 0-50,000 ohms and 0-5 megohms.
- Hot Neon Shorts Tube Tests—see Model 30 for details.
- English-reading Quality Tube Test which closely relates to Power Output Test.
- Relaxation Oscillator Condenser Test provides a positive test for shorts or leakage on all electrolytic paper or mica types.
- Output Meter.

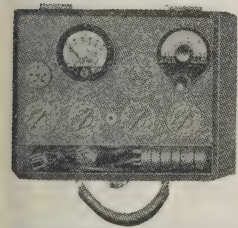
No. 30-31—Webber Complete Radio Servicer.....\$59.95



HICKOK MASTER SERVICE OSCILLATOR

All-wave R. F. and A. F. Fundamental frequencies from 100 K.C. to 25,000 K.C. Calibrated audio freqs. output continuously variable from zero to 10,000 cycles. Absolutely accurate R. F. reading direct on dial. Uses 1-12A7 and 1-6F7 tubes. Has self-contained power supplies. Meter has dual scale range, 0 to 1 Mil. and 0 to 10 Mil. Works as output meter. There are so many features in this oscillator that we cannot list them all here. We suggest that you write us for descriptive circular.

No. H46.....\$48.00



THORDARSON CAPACITY AND LEAKAGE TESTER —KIT FORM

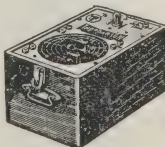
Checks capacities from .001 to 50 Mfd. in 5 ranges. Also any unknown resistor, condenser or iron core choke can be compared with any like known standard by use of bridge ratio comparison. Leakage indicated by Neon bulb.

FOUNDATION KIT—Consists of portable walnut case; a drilled and etched metal panel and scale, hardware, and full instructions.

No. T7500.....\$2.70

KIT OF ADDITIONAL PARTS—Contains transformers, chokes, rheostat, Neon, socket, rotary switch, condensers, hardware, and wire.

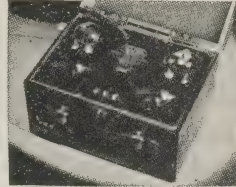
No. T7500X.....\$5.50



SOLAR PRECISION CAPACITOR ANALYZER

8 Important Features:

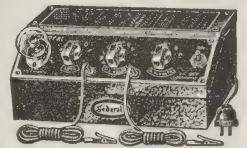
- Measures capacity accurately—all types electrolytics, paper and mica condensers by means of a built-in, thermionically-controlled WIEN BRIDGE. Measures capacity between circuit wiring. Capacity range—.00002 to 70 Mfd.
- Measures leakage—directly indicates leaky, shorted, open, intermittent, low or high capacity and power factor of condensers.
- Indicates Dielectric Resistance of all types of insulation, insulators, coil windings, etc.
- Continuity meter.
- Two-dial control.
- Direct reading—no complicated calculations or graphs.
- Easy to use.
- Compact, portable—strong case with hinged lid and handle—weight 7 lbs., size $9\frac{1}{2} \times 7\frac{1}{4} \times 6\frac{1}{4}$ inches.



We recommend this instrument as being the ideal condenser—it really gives you direct reading of actual capacities. Uses 58 and 80 tubes—not included. Neon bulbs furnished. No. CA-1—Solar Condenser Tester.....\$17.34

FEDERAL COND. ANALYZER

Tests—leakage, opens, shorts of all types of condensers ranging in capacity from .0005 to 18 Mfd. and voltage ratings from 25 to 600 volts. Adaptable to resistance continuity testing as a "Neonized Megohmmeter." This is a well-built instrument and is furnished complete with test leads, special Neon bulb and an 80 tube together with full instructions and charts. Size $8\frac{1}{2} \times 4\frac{1}{2} \times 3\frac{1}{4}$ inches. No. FEC-990.....\$9.90



VAN'S CONDENSER ANALYZER

A super-sensitive Neon type. Indicates leakage resistance, intermittent connections, opens and shorts. Besides testing all types of condensers it will test spark plugs, leaks in high tension wiring, distributor caps and points, commutator grounds and other forms of auto elec. troubles. Adjustable output voltages. Comes equipped with a 2 watt Neon bulb, an O1A tube, 5 ft. R/C cord, heavy duty test prods and complete instructions. Size $7\frac{1}{2} \times 5 \times 4$ inches.

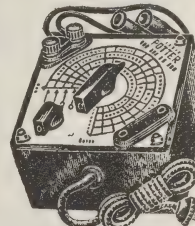
No. VCT.....\$7.95



POTTER UNIVERSAL CONDENSER TESTER

Has four ranges to cover all capacities from .0001 to 30 Mfd. Tests all types of condensers. Designed to be used with a pair of headphones or high resistance A.C. voltmeter for indication of balance. Has a large, easy-to-read scale. In steel case $5\frac{1}{2} \times 5\frac{1}{2} \times 3\frac{1}{2}$ inches with celluloid scale. Comes complete with line cord and test leads together with full instructions.

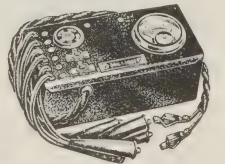
No. PO-975.....\$9.75



MILLION VIBRATOR TESTER

Condition of vibrators shown "good" or "poor" on English-reading scale. Tested under actual working conditions. Tests all types of vibrators. Polarity reversing switch. Black metal container $7 \times 3 \times \frac{1}{2}$ inches. Comes complete with all leads and battery terminals and full instructions.

No. MVST.....\$9.95



HICKOK CAPACITY TESTER

Reads capacity of condensers direct on meter scale—no charts or complex calculations. Absolutely accurate. Works on all types of condensers. Large $\frac{3}{4}$ -inch D'Arsonval Meter is calibrated in microfarads. Range from .0001 to 20 Mfd. Complete with leads, A.C. cords and detailed instructions on how to measure inductance in Henries with this tester. Size $6\frac{1}{2} \times 3\frac{1}{2} \times 3\frac{1}{2}$ inches.

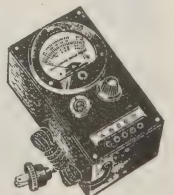
No. H4780.....\$19.80



HICKOK VOLT-OHM-MILLIAMMETER

Has large $\frac{1}{4}$ -inch D'Arsonval Meter. Ranges: volts A.C.-D.C. 0-10-50-250-500-1,000; ohms—0-1,000, 0-100,000, 0-10 megohms; mils.—0-10-50-250. Has jacks for use as output meter. This is considered to be one of the finest Universal Testers on the market. Complete with test leads and batteries.

No. H49X.....\$24.60



"NET PRICES"

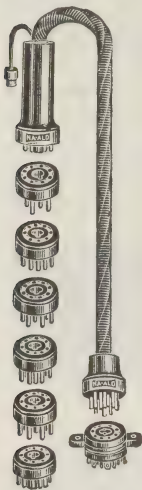
ADAPTERS



NAALD UNIVERSAL METAL TUBE CHECKING ADAPTER

Allows testing of all-metal tubes in Type 36 socket of any tube checker. Contains three octal sockets—tests ALL of the new metal tubes. Two toggle switches permit testing both plates of 5Z4, 6H6 and 6N7 double plate tubes. Eliminates all other adapters. Directions for testing are etched on metal escutcheon plate.

No. 950GEM—Complete\$3.90



NEW 9-WIRE OCTAL LOCKING TYPE ANALYZER PLUG

Complete Analyzer Plug, Cable, Cable Plug, Socket and Adapters
Twist locking analyzer plug with 5 ft. 9-wire cable and wired in dual grid stud. Cable fitted with 9-prong finger grip type cable plug. A 9-hole socket is included for mounting on analyzer panel. (Ninth contact in center.) Six associated adapter for testing both the new all-metal tubes and regular glass bulb tubes included.

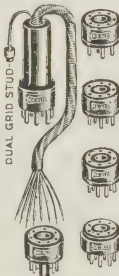
No. B498—Complete kit\$6.90
No. B491—Locking type octal analyzer plug, only\$1.50
No. 908X—5 ft. of 9-wire cable attached with 9-prong cable plug and 9-contact socket to match\$1.80

Associate Adapters

No. B492—8 to 4-prong associate locking adapter.....\$0.60
No. B493—8 to 5-prong associate locking adapter......60
No. B494—8 to 6-prong associate locking adapter......60
No. B496—8 to 7-prong large associate locking adapter......60
No. B495—8 to 7-prong small associate locking adapter......60
No. 988TL—8 to octal associate locking adapter......60

NEW NON-LOCKING PLUG AND ADAPTER KIT

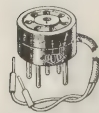
This new kit includes the small 7-prong analyzer plug with dual-grid cap for glass and metal tubes, and cable attached together with associate adapters for 4, 5, 6, 7 and new octal 8-hole sockets. Plug has small base for entering closely shielded sockets.



No. 907CA—Complete kit.....\$3.20

Associate Adapters

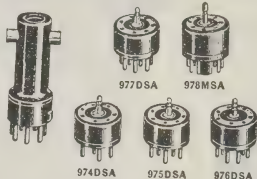
No. 907PA—Small 7 analyzer plug \$0.45
No. 907X—5 ft. of 8-wire cable, plug attached.. .90
No. 974DA—Small 7 to 4-prong associate adapter......30
No. 975DA—Small 7 to 5-prong associate adapter......30
No. 976DA—Small 7 to 6-prong associate adapter......30
No. 977D—Small 7 to 7-prong large associate adapter......30
No. 978MA—Small 7 to 8-prong octal associate adapter......60



EARPHONE AND LOUD SPEAKER ADAPTERS

Enable you to listen to DX at any time without disturbing rest of family. Plugs into detector or first audio socket. Good for hard-of-hearing. Can also be used for adding additional speakers to sets having one power tube.

No. B262—4-prong\$0.45
No. B162—5-prong 45
No. B364—6-prong 45
No. B572—7-prong, small.....45
No. B573—7-prong, large.....45



LATCH-LOCK ANALYZER PLUG AND ADAPTER KIT

For glass and all-metal tubes. Bakelite 7-prong small latch-lock analyzer plug. Plug has built-in grid connection for glass tubes and another for metal tubes. Kit includes five latch-lock adapters from 7 small to 4, 5, 6, 7 large and 8 octal prongs. Good replacement item for replacing a worn-out cable from last year's test equipment. Plug and adapters are small type that go inside tight tube shields. No cable included.

No. B815—Kit\$3.45

Associate Adapters

Latch-Lock Type

No. B1078L—Small 7 to 4-prong...\$0.45
No. B1079L—Small 7 to 5-prong...45
No. B1080L—Small 7 to 6-prong...45
No. B1081L—Small 7 to 7-prong large.....45
No. B1085L—Small 7 to 8-prong octal 60



MODERNIZE YOUR ANALYZER

To be used on any small seven-prong latch-lock analyzer plug. Every service man can bring his equipment up-to-date

this inexpensive way.

No. B1085L—Use on small 7 latch-lock plug. Used in octal sockets (except 5Z4)\$0.60
No. B540—Same as above but for 5Z4\$0.60
No. B426—Octal top, small 7-prong base to be plugged into analyzer socket..\$0.60

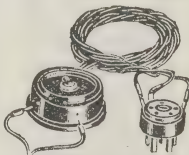
ELECTRON-RAY TUNING INDICATOR ADAPTER

Enables any set having 6-volt tubes and A.V.C. to use 6E5. Adapter is placed between power output tube and its socket. Tube not included.

No. 9ER6—For use with 41 or 42 tubes\$2.10

NEW 3-PRONG BATTERY PLUG

Fits new style "B" and "C" batteries. Molded bakelite.
No. 103-1—For "B" batteries.....\$0.07
No. 103-2—For "C" batteries......07



SPEAKER AND PHONE SWITCHING ADAPTERS

For use on any 5 or 6 tube output tubes. Permits interthrowing of toggle switch. Phones and adapter remain connected. No wiring necessary.

No. 955PSC—For single 5-prong pentodes\$1.50
No. 955PSW—For P. P. 5-prong pentodes 1.50
No. 966PSC—For single 6-prong pentodes 1.50
No. 966PSW—For P. P. 6-prong pentodes 1.50



ADAPTERS FOR TESTING NEW METAL TUBES

No. B411—Octal top and UX base for testing 5Z4 in Type 80 socket of any tube tester.....\$0.60

No. B412—Octal top and small 7-prong base for checking 6A8, 6K7 and 6L7 in Type 78 socket; 6J7 in the 77 socket; 6C5 in the 41 socket and 6D5 and 6F6 in the 42 socket of any tube tester..\$0.60

No. B413—Octal top and large 7-prong base for checking the 6N7 in the 6A6 socket of any tube tester.....\$0.60

No. B417—Octal top and 6-prong base for checking 6H6 in Type 85 socket of any tube tester.....\$0.60

No. B415—Octal top and 5-prong base having a lead with new metal tube S. G. cap and regular control grid stud attached. Checks 6A3, 6C5, 6D5, 6F6, 6J7, 6K7 and 6L7 tubes in the 38 socket of any tube tester and the 6N7 in the 37 socket\$0.75



FOR TESTING 6H6 IN 36 SOCKET

Octal top, 5-prong base. A specially designed resistance network supplies the diode plates with proper value of diode test voltage and current. A switch on the adapter provides for checking each section.
No. B486.....\$1.20

MODERNIZING ADAPTERS

For Using ALL-METAL TUBES in Place of Glass Tubes



Old Tube Replaced	Metal Tube Used	Base of Adapter	Part No.	Price
80	5Z4	4-prong	B427	\$0.60
76	6F5	5-prong	B431	.60
75 triode	6F5	6-prong	956MI	.60
41 or 42	6D5	6-prong	B428	.60
77 or 6C6	6J7	6-prong	B432	.60
73 or 6D6	6K7	6-prong	B432	.60
41 or 42	6F6	6-prong	B432	.60
75 or 85	6B6	6-prong	B432	.60
6F7	6P7	Small 7-prong	977M5A	.60
6A6	6N7	Large 7-prong	987MI	.60
6A7	6A8	Small 7-prong	987MIA	.60



MODERNIZING ADAPTERS

For Using Newer Type Glass Tubes in Place of Older Type Glass Tubes

Old Tube Replaced	New Tube Used	Part No.	Price
24A	57	965-58	\$0.30
35	58	965-58	.30
45	47	954-47	.30
K403	2A5	964-403	.60
45	59	974GGR	.60
47	2A5	956GKR	.60
K401	56	954-401	.60
45	2A5	964KSPR	.60
UV (Base)	UX (Base)	999	.45
7 small	7 large	977MS	.40
7 large	7 small	977SM	.40
4-5-6 prong	7 large	9C7	.60

PHONO. OR MICROPHONE ADAPTER

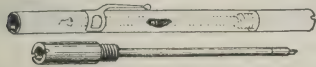
See illustration of Earphone Adapter

Enables you to connect a phonograph pick-up or microphone to any radio set. Instructions furnished.

No. B245—4-prong\$0.60
No. B299—5-prong 60
No. B247—6-prong 60
No. B246—Small 7-prong.....60
No. B248—Large 7-prong.....60

TEST BENCH ACCESSORIES

NEUTRALIZING TOOLS



No. 118
4-in-1 Neutralizing Tool. Very durable\$0.45



Balancing and Neutralizing Majestics and other sets. Handy attachment No. 281.....\$0.27

No. 119-M—For Majestics \$0.12

No. 119-C—For Crosleys..\$0.12



No. 996 — 4-in-1 Neutralizing Tool with metal ends.....\$0.80

"NINE LIVES" NEUTRALIZING WRENCH



A "hot" new number. Entire length of inside of tube is broached. If the end breaks, just saw off the end and you have a new tool.

No. B254—5½ inches long.....\$0.12

No. B255—8 inches long......15

DE LUXE ADJUSTABLE NEUTRALIZING TOOL



No metal parts. Screw driver slides into one end of handle. Other end is hex. broached. Made of hard rolled fibre.

No. B236—Adjustable 7 to 10-in....\$0.36

No. B237—Adjustable 11 to 17-in....48

MUELLER "SNAPPER" "TRIPLE THREAT" TEST CLIPS

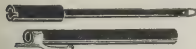


Jaws are opened by press of thumb on the end. An extremely handy tool to have around.

No. M83R—Red—M83B. Each.....\$0.50

Per pair 95

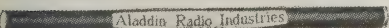
4-IN-1 NEUT. TOOL



Made of Phenolic in mottled two-color. Look like fountain pens.

No. I1027—Value plus.....\$0.29

ALADDIN RESONATOR



Determines instantly whether any tuning inductance is high or low by simply placing it in the magnetic field of the inductance. Flexible construction.

No. AR-1.....\$0.60

OFF-SET SCREW DRIVERS

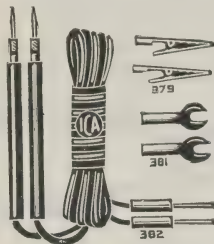


Another necessary tool for servicemen. Made of hardened, high carbon steel, cadmium plated.

No. B1116—2¾ inches long.....\$0.09

No. B1117—4½ inches long......12

TEST LEADS



No. 1379—With alligator clips.....\$0.36

No. 1381—With spade terminals.... .30

No. 1382—With phono. tips......30

PHONO. NEEDLE POINT

With slim handles and flexible wire. Black and red kinkless wire. 54 inches long as illustrated on left.

LONG POINT

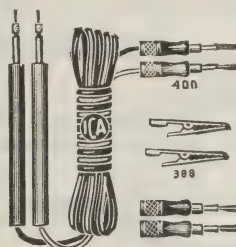
Like No. 1379 except they have long pointed prods instead of phono. needle points. 50-inch kinkless red and black wire.



No. 1369—With phono. tips.....\$0.30

No. 1383—With spade lugs......30

No. 1370—With alligator clips......36



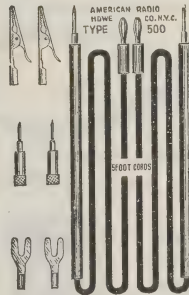
HEAVY DUTY LABORATORY

With extended phono. needle chuck. Extra long and heavy handles. 60-inch heavily insulated kinkless wires. You'll like these.

No. 1388—With alligator clips.....\$0.54

No. 1400—With phono. plugs and insulated knurled grip handles.....\$0.60

PENCIL TYPE TEST PRODS



With Interchangeable Tip Ends

6-inch handles ¼ inch diameter. 5 foot heavy duty flexible red and black leads. Complete as illustrated.

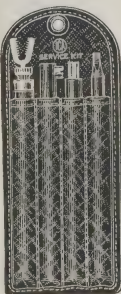
No. A500
\$0.80

NO. 998 NEUTRALIZING AND ALIGNING KIT

12 Separate Units

Black Leatherette Case

Every serviceman should have this useful kit...\$2.40



NA-ALD EQUIPMENT



Na-Ald No. 160—Candelabra Series Plug without leads. Each.....\$0.21

Na-Ald No. 161—With Na-Ald DeLuxe Test Prods. Each.....\$0.90

Na-Ald No. 164—Circuit Tester complete with plug-in base, Neon lamp. DeLuxe test prods with leads and extra points in prod handles. Boxed in durable clasp-hinge pocket carrying case. Each.....\$1.80

No. 110—Two-piece Molded Test Prod Handle. Each.....\$0.24

No. 111—Molded Test Panel Handle. Each.....\$0.12

No. 112—Molded Small Space Handle. Each.....\$0.06

No. 113—Molded Finger Grip Handle. Each.....\$0.09

No. 100-J—Pressure Plug Molded Jack (Black). Each complete.....\$0.09

No. 100-JR—Pressure Plug Molded Jack (Red). Each complete.....\$0.09

No. 101-J—Phone Tip Molded Jack (Black). Each complete.....\$0.09

No. 101-JR—Phone Tip Molded Jack (Red). Each complete.....\$0.09

No. 102-J—Circuit Opening Molded Jack (Black). Each complete.....\$0.21

No. 102-JR—Circuit Opening Molded Jack (Red). Each complete.....\$0.21

No. 103-J—Double Circuit Molded Jack (Black). Each complete.....\$0.21

No. 103-JR—Double Circuit Molded Jack (Red). Each complete.....\$0.21

No. N Point. Each......06

No. P Point. Each......09

No. T Point. Each......03

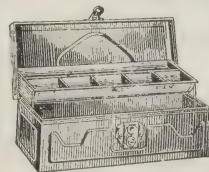
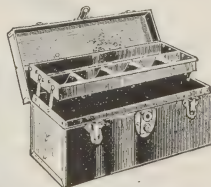
No. S Point. Each......06

No. D Point. Each......15

KENNEDY TOOL CHEST

Size 14x6x6 inches. Cantilever action—tray opens when lid is raised. Sturdily built.

No. C514...\$1.00



UNION TOOL CHEST

Sturdily built—cantilever tray. Size 16x7x7 inches. No. U6116...\$0.55

TEST KIT

Consists of test prods, plugs, jacks and interchangeable testing parts. All solderless. Perfect connections at all times. Made up of red and black parts for polarity identification.



No. AH100—Value-plus\$0.99

"NET PRICES"

PLIERS - SCREWDRIVERS

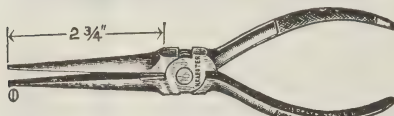
KRAEUTER SUPREME QUALITY PLIERS

Full Nickel Finish



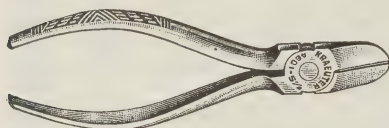
NEEDLE NOSE SIDE CUTTING PLIERS

No. K1661—6 in.....\$1.10



EXTRA LONG NOSE PLIERS

No. K1771—7 in.....\$0.99



DIAGONAL CUTTING PLIERS

No. K4601-5—5 in.....\$1.40
No. K4601-6—6 in.....1.55



IGNITION PLIERS

No. 743—4 1/2 in.....\$0.39



OUR SALES LEADER

Six-inch side cutting, long nose plier. Good quality. A real value.
No. 1332 Boker.....\$0.35

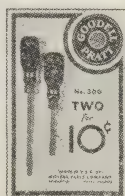


FORGED STEEL COMBINATION PLIERS

No. KS10—6 in.....\$0.25
Value-Plus.

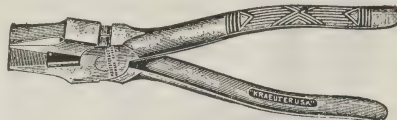
One 1 1/2 in. blade; one 2 1/2 in. blade. Good quality. Set of two.

No. GP300.....\$0.10



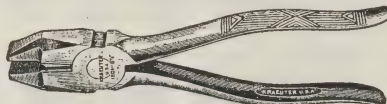
KRAEUTER INDUSTRIAL QUALITY PLIERS

Same high quality as the famous Supreme Line except finish is the new last non-smudging black impregnated into the metal.



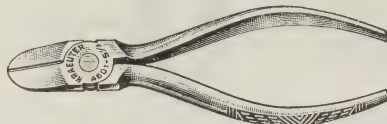
ELECTRICIANS' SIDE CUTTING PLIERS

No. K1381-8—8 in.....\$0.79



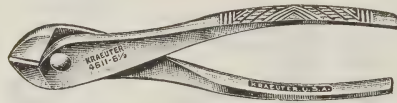
HY-POWER HEAVY DUTY PLIERS

No. K8016—6 in.....\$0.99
No. K8017—7 in.....1.20



DIAGONAL CUTTING PLIERS

No. K6015—5 in.....\$0.95
No. K6016—6 in.....1.15



EXTRA HEAVY DIAGONAL CUTTING PLIERS

No. K6116 1/2—6 1/2 in.....\$1.20



NEEDLE NOSE SIDE CUTTING PLIERS

No. K6616—6 in.....\$0.85
No. K6716—Same but no side cutters .75



EXTRA LONG NOSE PLIERS

No. K7717—7 in.....\$0.79

SCREW DRIVER KIT

Insuloid Handles

Contains six sturdy units in a leatherette case. Sizes range from 4 1/2 inches long to 10 1/4 inches long. A handy service unit.

No. 1930.....\$1.05



HELLER MASTERENCH

Length 8 in. Polished. Handles, bolts, nuts, pipes, etc., up to 1/4 in.
No. HMR8.....\$1.35

"NET PRICES"



Hammered forged steel blade, hardened and tempered. Hardwood handle.

No. MS7777-4—4 in. blade.....\$0.15
No. MS7777-6—6 in. blade......18
No. MS7777-8—8 in. blade......20



BUD "SHOCKPROOF" SCREW DRIVER

Double grip bakelite handle.

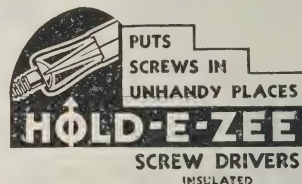
Blade Width	Length	Over-All	Price
No. 1101B—1/4 in.	5-5/16 in.		\$0.12
No. 1103B—5/32 in.	7 1/4 in.		.18
No. 1105B—1/4 in.	9-5/16 in.		.15
No. 1107B—3/16 in.	9-5/16 in.		.21
No. 1108B—1/4 in.	10 1/4 in.		.24



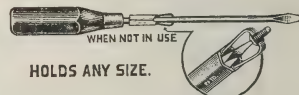
BUD EASY STARTING SCREW HOLDERS

Really Holds Screws Tight—Double Grip Handle of Bakelite

No. 852—1/4 x 3/4 inches	over-all...	\$0.10
No. 853—5/8 x 7 inches	over-all....	.12
No. 854—3/4 x 9/16 inches	over-all....	.15
No. 856—1/2 x 8/8 inches	over-all....	.15



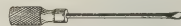
Handle of unbreakable, transparent amber fibrolid. Blade 2 in.; over-all, 3 1/4 in.
No. R-2—Each.....\$0.23



HOLDS ANY SIZE.

As illustrated—really grips screws—wood handle.

No. R-4—Hex. diam., 5/32 in.; length 4 in.; over-all, 8 in. Each.....\$0.30
No. R-10—Hex. diam., 5/32 in.; length, 10 in.; over-all, 14 in. Each.....\$0.36



INSULATED HANDLE—HARDENED STEEL

Narrow blade, just right for screw slots of knobs and dials. Handle of amberoid with pocket clip.

No. AH302—3 in. blade.....\$0.09
No. AH303—4 in. blade......11
No. AH304—5 in. blade......12



GOODELL-PRATT NO. 66 5-INCH RATCHET SCREW DRIVER

Of highest quality. Net.....\$0.75



STEEL AWL

2 1/2 in. tapered, pointed and polished steel blade. Hardwood handle.
No. MS10.....\$0.10

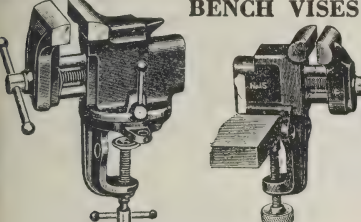
DRILLS — VISES — PUNCHES — DIES — TAPS



HAND DRILL
Capacity
0 to 1/2 in.
Single speed. Solid steel frame. Three-jawed chuck. Length 10 1/2 in.
No. MS2500\$0.70



BENCH DRILL
Two Speed.
Capacity 0 to 1/2 in.
Machine cut gears—quick, positive gear shift. Three-jawed steel chuck.
No. MS7740\$2.20



BENCH VISES
No. 18 No. 15
No. 15—Machined jaws 1 1/2 in. wide. Clamps to bench up to 2 in. thick. Jaws meet squarely—smooth action. 2 1/2 lbs. Value-plus\$0.65
No. 18—Swivel Type. Equipped with swivel base so vise can be swung to any desired angle and locked. Machined jaws 2 1/2 in. wide; opening 2 1/4 in. Clamps to bench up to 2 in. thick. 4 1/4 lbs. A bargain at.....\$1.30

FILES
Half round bastard file. 8 in. long. Spiral and double cut.
No. HHR8.....\$0.50

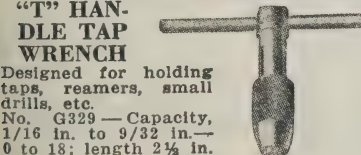
Round bastard file. Spiral and double cut.
No. HR4—4 in. long.....\$0.20
No. HR6—6 in. long......25
No. HR8—8 in. long......30

Mill bastard, blunt, single cut.
No. HM8—8 in. long.....\$0.30

Extra slim taper saw file. Single cut.
No. HST6—6 in. long.....\$0.20
Double extra slim taper saw file. Single cut.
No. HDT4—4 in. long.....\$0.15
Tungsten point files.
No. HTP5—5 in. long.....\$0.15



SOCKET AND CONDENSER PUNCHES
An ideal tool for service engineers, amateurs, set-builders, etc. Quickly punches clean round holes in sheet metal stock. Hardened steel construction assures long life. Easy to use, 1-3/16 in. punch is standard socket size. 1/2 in. and 3/4 in. types are ideal for punching mounting holes for inverted electrolytic condensers. Holes may be punched without disturbing other parts.
K 133—For 1 1/4 in. holes.
K 1316—For 1-3/16 in. holes.
K 78—For 3/4 in. holes.
K 34—For 1/2 in. holes.
Price each.....\$1.70



"T" HANDLE TAP WRENCH
Designed for holding taps, reamers, small drills, etc.
No. G329—Capacity, 1/16 in. to 9/32 in.—0 to 18; length 2 1/2 in.
Each\$0.50

"GREENFIELD" STRAIGHT SHANK TWIST DRILLS



Carbon Steel No. 105			
Diam. Inches	Price Each	Diam. Inches	Price Each
1/32	\$.08	11/64	\$.10
1/16	\$.08	3/16	\$.10
5/64	\$.08	7/32	\$.13
3/32	\$.08	1/2	\$.17
7/64	\$.09	5/16	\$.23
1/2	\$.09	3/4	\$.30
9/64	\$.09	7/16	\$.45
5/32	\$.09	1	\$.60

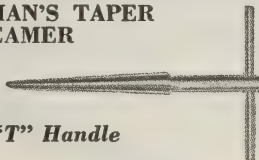
CARBON DRILL SET Chrome Plated Stand



A very handy and popular drill set for radio men. Don't lose your drills—have them in this handy stand, ready for instant use. Consists of ten of the most popular drills (1/16 in. to 1/2 in.). Best quality carbon steel.

No. GD21\$0.99
Same set in HIGH-SPEED super service twist drills. No. GD621.....\$2.25

REPAIRMAN'S TAPER REAMER



With "T" Handle

For enlarging holes in all kinds of material.
No. TH-5—1/2 in. at large end, 1/4 in. at point. Length over-all, 6 1/2 in....\$0.70



BURRING REAMERS Finest Steel

Designed especially for removing burrs, for countersinking and for enlarging holes in thin metal.

Bit Brace Shank			
Cat. No.	Capacity, Inches	Diam. at Large Point End	Price
G242	1/4 to 1	3/16 in. 1 1/4 in.	\$1.00
G244	1/4 to 2	3/4 in. 2 1/4 in.	2.25
Round 1/2 in. Shank			
G234	1/4 to 2	1/4 in. 2 1/4 in.	\$2.25

"O. K. JR." NO. G305 MACHINE SCREW TAPS



Cat. No.	Size Thread	Price
G305-4	4/36	\$0.19
G305-6	6/32	.17
G305-8	8/32	.17
G305-104	10/24	.19
G305-102	10/32	.22
G305-12	12/24	.25
G305-14	1/4-14/20	.28

"O. K. JR." ROUND DIES



The dies, which are adjustable, are held in the stock by three tapered screws which give the proper adjustment.
Sizes 4/36, 6/32, 8/32, 10/32, 10/24, 1/4/20.
Each\$0.48

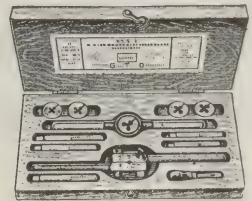
"O. K. JR." ADJUSTABLE DIE STOCKS



For "O. K. Jr." Round Dies. Insures the cutting of straight threads. Guide can be instantly adjusted to fit any size rod within range of the screw plate.
No. G13—For 13/16 in. O. D. round dies listed above.....\$0.65

"NET PRICES"

"O. K. JR." ROUND DIE SCREW PLATES



These screw plates have an "O. K. Jr." Round Split Die and "O. K. Jr." Tap for each cutting size. A small screw driver is furnished in each set. For machine screw and fractional sizes—with 13/16 in. and 1 in. diameter dies.
No. B3—Sizes 6/32, 8/32 and 10/24. Per set.....\$1.90
No. B5—Sizes 4/36, 6/32, 8/32, 10/24 and 12/24. Per set.....\$3.00
No. B7—Sizes 4/36, 6/32, 8/32, 10/24, 10/32, 12/24 and 1/4/20. Per set....\$3.75
O. K. 3 Tap Wrench and 13/16 in. diam. Dies standard for each number.

Hardware

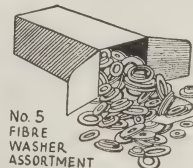


HARDWARE ASSORTMENT

1,000 Pieces

1,000 assorted screws, bolts, nuts, lugs, washers, grommets, eyelets, etc., in heavy cardboard box with compartments for each assortment. All popular type hardware that you use every day. A VALUE-PLUS OFFER.
No. HA1000.....\$0.95

FIBRE WASHER AND RUBBER GROMMET ASSORTMENT

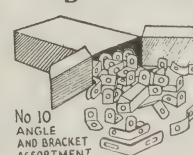


100 pieces
Fit No. 4, 6, 8, 10—1/4, 3/8, 1/2 in. holes.
\$0.20

Self-Tapping Screw Assortment
40 Screws
Very handy for service men.
No. 12....\$0.20



Angle and Bracket Assortment

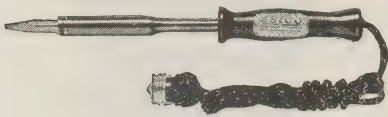


No. 10—28 pieces
Most popular sizes and types.
\$0.20

SOLDERING IRONS—ACCESSORIES—TORCHES

ESICO SOLDERING IRONS

The Best Low-priced Soldering Irons Ever Made



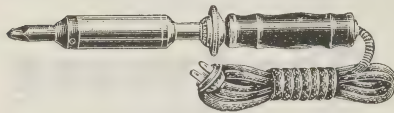
Junior—85 watts, tip 7/16-inch diameter, weight 9 oz., length 12 1/4 in. Quick heating and sturdy.

No. E17J\$1.65
No. E17JT—Extra tip 18
No. E17JE—Element 81

Midget—65 watts, tip 7/16-inch, weight 7 oz., length 11 1/4 in. A nice iron for intermittent work.

No. E16M\$1.05
No. E16MT—Extra tip 18
No. E16ME—Element 75

JACKSON SOLDER IRON

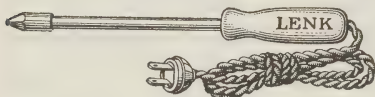


No. 145J—100 watts, tip 3/8 in., length 12 1/2 in., weight 16 oz. Adjustable tip. Has heat deflector, keeps handle cool. A real heavy duty iron.....\$2.25
No. 145JT—Extra tip..... .40

LENK MARVEL ELECTRIC SOLDERING IRON



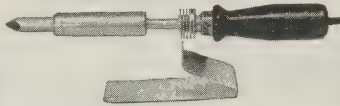
Not a toy—does a good job. Quick heating. tip, 10 1/4 in. long. Tip 2 1/2 x 5/16 in. Weight 5 oz.
No. L40—40 watts.....\$0.29



No. 50A—12 in. over-all length. 1 1/2 x 3/8 in. tip, 50 watts. Weight 11 oz. A serviceable iron.....\$0.85

VASCO

The World's Highest Quality Soldering Irons



We have sold hundreds of the Vasco Irons and recommend them unreservedly as being the best money can buy. Each iron has the Vasco Radiator Bushing. You'll like the fine balance and appearance and you'll find they really do the work and stand up.

No. V 75—70 watts, 5/16 in. tip...\$3.00
No. V100—120 watts, 3/8 in. tip.... 4.50
No. V150—150 watts, 1/2 in. tip 5.00

ELEMENTS

No. V 75EA—For V 75.....\$2.00
No. V100EA—For V100..... 3.10
No. V150EA—For V150..... 3.30

TIPS

No. V 75T—For V 75.....\$0.50
No. V100T—For V100..... .65
No. V150T—For V150, 3/8 in. 50
No. V150TL—For V150, 1/2 in. 65

"American Beauty"

The Best Soldering Iron for All-Around Usage That Has Ever Been Produced



No. 3138—100 watts, diameter of tip 3/8 in.; over-all length 12 1/2 in. Complete with cord and a new heat insulating stand\$5.80



No. 3158—200 watts.....\$6.90

ELEMENTS

No. AB9273—For No. 3138.....\$2.95
No. AB9275—For No. 3158..... 3.70

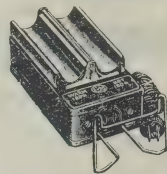
TIPS

No. AB3738—For No. 3138.....\$0.40
No. AB3758—For No. 3158..... .90

GM WARM IRON CONTROL

Saves money, time, trouble and tips. Will pay for itself in short while. You need one on your bench. A bargain.

No. GM-11.....\$2.95



IRON OVEN

A device that should be on every service bench. Keeps your iron warm or brings it to full heat quickly. No. I1966A...\$0.75



ICA SNAP-ON IRON HOLDER



Fits all sizes and makes of soldering irons. Can be left on constantly. Raises iron about 2 inches off from the work bench.

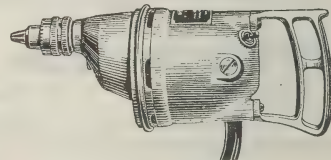
No. I1956.....\$0.21

BUD RENEWAL TIPS



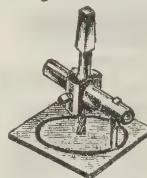
No. B371—For Am. Beauty 576....\$0.21
No. B372—For Am. Beauty 3138.... .21
No. B373—For Am. Beauty 3158.... .54

SIGNAL OB-2 PORTABLE ELECTRIC DRILL



1/4-inch. Length 11 1/4 inches; diameter 4 inches; weight 6 lbs.....\$16.95

ADJUSTABLE PANEL CUTTERS



Designed to cut large holes accurately and quickly. May be used in slow speed drill press or hand brace. May be used for cutting wood, bakelite, sheet metal, etc.

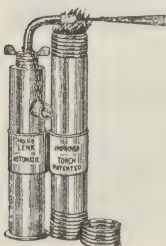
No. GH5—Jumbo size, heavy duty. Cuts holes 1 to 5 1/2 inches Square shank...\$1.85
No. GH2—Cuts holes 1 to 4 inches, round shank.....\$1.10
No. GHJ—Junior, cuts holes 5/8 to 2 1/2 inches\$0.75

STEEL HOLE SAWS

No. MF19—For cutting holes 1-3/16 in....\$1.55
No. MF22—For cutting holes 1 1/8 in....\$1.55
No. MF34—For cutting holes 2 1/4 in....\$2.30
No. MF46—For cutting holes 2 3/4 in....\$2.30
Above prices include holding cup—it is necessary to use No. MF2054 mandrel. Each\$1.10

TRANSMITTER POWER SUPPLY VALUES

Plate Supply Voltage	Operating Full Load Current, Milliamps.	Bleeder Resistor		Swinging Choke (Henries)	(Micro-farads)
		Ohms Resistance	Maximum Current in Milliamps.		
400	160 or less	25,000	25	5/25	4
	125 or less	40,000	37	8/40	3
	126 to 150	35,000	35	7/35	4
	151 to 175	30,000	43	6/30	4
	200 or less	40,000	37	8/40	3
750	201 to 225	35,000	35	7/35	4
	226 to 250	30,000	43	6/30	4
	251 to 300	25,000	45	5/25	4
	165 or less	60,000	22	12/60	2
	166 to 200	50,000	28	10/50	2
1,000	201 to 300	35,000	50	7/35	4
	301 to 400	25,000	56	5/25	4



LENK NO. 108

Alcohol blow torch, shown on left.....\$0.75

LENK NO. 175A

Duplex, alcohol, automatic, has handle \$1.20

LENK NO. 30

Champion blow torch. Alcohol, starts in 20 seconds\$1.95



LENK NO. 105

Hi-heat alcohol torch. Flame control and cut-off valve.....\$1.20

LENK NO. 140

Gas torch. Same features as No. 105..\$1.05



LENK NO. 17

Gas torch. Has priming cup for quick action. Automatic\$0.60

LENK NO. 225

Automatic alcohol torch. Burns 3 1/2 hours on one filling. Shown on left\$1.50

LENK NO. 125

Heavy duty gas torch. Self-priming—large capacity\$0.81

SOCKET WRENCHES

BUD INSULATED HANDLE SOCKET WRENCHES



Bakelite Handle

No. B1086—Hex. size 3/16 in.	\$0.18
No. B1087—Hex. size 1/4 in.	.18
No. B1088—Hex. size 5/16 in.	.21
No. B1089—Hex. size 11/32 in.	.21
No. B1090—Hex. size 3/8 in.	.24
7 1/4 in. long	
No. B1091—Hex. size 3/16 in.	\$0.21
No. B1092—Hex. size 1/4 in.	.21
No. B1093—Hex. size 5/16 in.	.24
No. B1094—Hex. size 11/32 in.	.27
No. B1095—Hex. size 3/8 in.	.30

ICA TURN-TITE SOCKET WRENCHES



No. I6—6-inch, 6 sizes, 3/16 to 1/2 in.	
Each, \$0.14; set of 6.....	\$0.78
No. I9—9-inch, 6 sizes, 3/16 to 1/2 in.	
Each, \$0.18; set of 6.....	\$1.05
With 90° Offset Shank—7 Inches	
Over All	
No. 06—6 sizes, 3/16 to 1/2 in.	
Each, \$0.18; set of 6.....	\$1.05

FLEXIBLE SHAFT SOCKET WRENCH



Has oval shaped socket.	
No. I915.....	\$1.20

STEEL-WHITE, NICKEL FINISH SOCKET SET

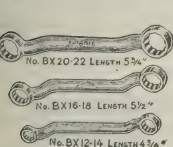


7 1/2 inches long. Sizes 1/4, 5/16, 3/8, 7/16 and 1/2 in.	
No. SK60—Per set.....	\$0.60

AVIATION TYPE SOCKET SET



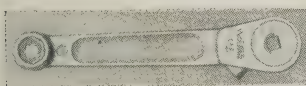
Has ten sockets with openings from 3/8 to 1/2 in.; reversible ratchet wrench 8 in. long; 8 in. hinged T handle with cross bar 6 in. long and an 8-in. extension bar. This set is of the highest quality	
chrome vanadium steel, chrome plated. Weight, 2 lbs.	
No. H13J.....	\$6.48



BOX WRENCHES Set of Three Handy Shorts

Fit 3/8, 7/16, 1/2, 9/16, 5/8 and 11/16 in.	
No. H300X.....	\$1.23

RATCHET WRENCH



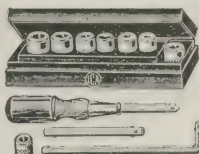
No. 867—Designed for electric refrigeration service and fits on 90% of all refrigerators	
.....	\$1.00

CENTER PUNCH



Knurled bodies, durable point.	
No. MF142—Each.....	\$0.15

ICA LOCK SOCKET WRENCH SET AND SCREW DRIVER

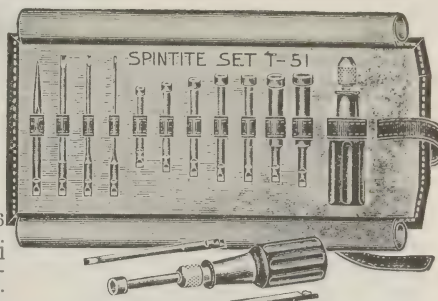


Cadmium plated, in sturdy box.

Contains:

- | | |
|--|---|
| 1 screw driver. | 6 sockets, 3/16 |
| 1 handle. | in. to 7/16 in. |
| 1 1/4-in. hex. handle and 5-in. extension, L-shaped. | 1 internal knurled socket. Fits 12 pt. double hex. nuts 3/16 in. to 3/8 in. |
| 1 1/4-in. hex. straight, 3-in. extension. | |

\$1.20

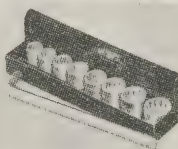


STEVENS WALDEN SPINTITE WRENCH SET

Complete, as illustrated....\$3.45

"Speed-Up"

SOCKET WRENCH KITS



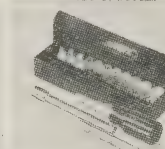
No. SW315

A competitive priced quality line of socket serviceman and amateur can afford one of these value-plus sets at these NEW LOW PRICES!

No. SW315—8 sockets and 1 handle in steel case.....	\$0.69
No. SW339—Small ignition set—8 sockets and 3 handles, in steel case.....	\$0.79

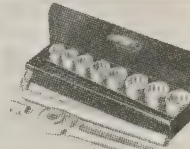


No. SW339



No. SW338

No. SW338—11 sockets and 3 handles, in steel case.....	\$0.89
No. SW318—De Luxe Set—8 sockets, 1 handle, 1 ratchet and 1 screw driver plug, in steel case.....	\$1.29



No. SW318

HINSDALE TOOLS OF QUALITY

The steel used in the tools listed below is the finest chrome vanadium steel. They are fully guaranteed.



MIDGET SOCKET SET

For all small nuts and bolts, chrome vanadium steel, chrome plated. Material—Chrome vanadium steel, heat treated and tempered. Triple chromium plate. All parts full polished. All sockets 12 point and 8 point. Openings as follows: Hex. 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16 in. Square—1/4, 5/16, 3/8 in. Slide T handle, and 6-in. forged extension bar with hard rubber screw driver type handle. Enameled metal box 1x1 1/2 x 8 in. Weight, 1 lb.

No. H11M.....	\$2.95
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COMPLETE SET



No. 11-M

For servicing radios, oil burners, refrigerators, electrical devices, automobiles, etc. Finest chrome vanadium steel, chrome plated.

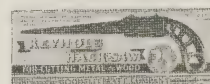
The set contains seventeen tools: Nine 9/32 square drive sockets as follows: Twelve point for hex. nuts with openings 7/32, 1/4, 9/32, 5/16, 11/32, 3/8, 7/16. Eight point for square nuts with openings 1/4 and 5/16, 4 1/2 in. slide T handle. 4 1/2 in. adjustable ignition pliers to fit all nuts up to 1/2 in. Midget screw driver with alloy blade and transparent insulated handle. Four end wrenches as follows: 13/64x7/32, 15/64x1/4, 9/32x11/32, 5/16x5/8. Size of metal carrying case 4x1 1/4 x 9. Weight, 1 lb. 10 oz.

No. H17M.....	\$5.34
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ELECTRICAL-IGNITION SERVICE KIT

Contains four chrome plated end wrenches covering eight sizes from 7/32 to 3/8 in. Fit all standard ignition, electrical and radio nuts and bolts; 3 locking position adjustable pliers; shockproof, unbreakable handle screw driver.

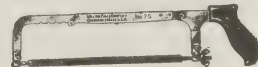
No. H6M.....	\$2.37
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KEYHOLE HACK SAW

No. MF237.....	\$0.25
Extra Blades	
No. MF7—Each	\$0.12

ADJUST- ABLE HACK SAW



Blade can be adjusted four ways. Capacity 8 to 12 in.; depth, 2 1/2 in. With one 10-in. blade.

No. MF99.....	\$0.55
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HACK SAW BLADES

Made of Hard Tungsten

No. MF23—10 in. long. Each.....	\$0.10
Dozen.....	.60
No. MF25A—12 in. long. Each.....	.10
Dozen.....	.60
Blu-Mol—Made of Molybdenum	
No. MF1024M—10 in. long. Each.....	\$0.25
Dozen.....	2.50



PRECISION FLEXIBLE STEEL RULE

No. MF106	
\$0.50	

INDICATING CALIPERS

Capacity up to 2 in. Calibrated in 16ths of an inch. One of the handiest measuring tools you can own.

No. GP331.....	\$0.50
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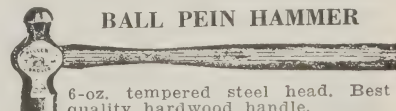


COMBINATION SQUARE

Steel blade 1 in. wide, 12 in. long. Figures and graduation lines are large, deeply etched. Beam is equipped with a cat's eye level and a scribe.

No. MS1200.....	\$0.85
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BALL PEIN HAMMER



6-oz. tempered steel head. Best quality hardwood handle.	
No. H800.....	\$0.75

HARDWARE

TINNED COPPER LUGS

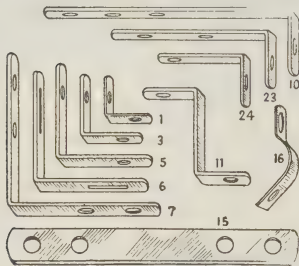


No. 1— $\frac{1}{8}$ -inch long—No. 8 hole.
 No. 2— $\frac{1}{8}$ -inch long—No. 8 hole.
 No. 3— $\frac{1}{8}$ -inch long—No. 8 hole.
 No. 4— $\frac{1}{8}$ -inch long—No. 8 hole.
 No. 5— $\frac{1}{8}$ -inch long—No. 8 hole.
 No. 7— $\frac{1}{16}$ -inch long—No. 6 hole.
 No. 9—Double end— $\frac{1}{8}$ -inch—No. 8 hole.
 No. 22—Angle double $\frac{1}{8}$ -in.—No. 8 hole.
 No. 9X—Center hole—4 ends—No. 8 hole.
 No. 18—Mounting bolt—1-in—6-32 screw.
 All 20 for.....\$0.05

Except

Nos. 9 and 9X—20 for.....\$0.10

ANGLES AND BRACKETS



No.	Name	Size	Price 10 for
1	Coil Angle.....	$\frac{1}{2}$ x $\frac{1}{2}$	\$0.09
3	Coil Angle.....	$\frac{5}{8}$ x $\frac{5}{8}$	.15
4	Panel Angle.....	$\frac{3}{4}$ x $\frac{3}{4}$	.17
5	Panel Angle.....	1 x 1	.20
6	Adj. Angle.....	$1\frac{1}{4}$ x $1\frac{1}{2}$	.25
7	Corner Angle.....	$1\frac{1}{2}$ x $1\frac{1}{2}$	.30
10	Large L Bracket..	$\frac{1}{2}$ x $2\frac{1}{2}$	.30
11	Coil Z Bracket..	$\frac{3}{4}$ high	.15
15	Flat Strip.....	3 in. long	.25
16	Grid Leak Br'ket.	$\frac{3}{4}$ x $\frac{7}{8}$	.15
23	Mid. L Bracket..	$\frac{1}{2}$ x $1\frac{1}{2}$	.25
24	Small L Bracket..	$\frac{1}{2}$ x $\frac{7}{8}$	.15

All above $\frac{3}{8}$ in. wide

TRANSFORMER BRACKETS

For Power Packs and Transformers

No. 18— $\frac{3}{4}$ x $3\frac{1}{2}$ in. Each.....\$0.06
 No. 25— $\frac{3}{4}$ x $4\frac{1}{2}$ in. Each......08
 No. 26— $\frac{3}{4}$ x $5\frac{1}{2}$ in. Each......10

SCREEN GRID CAPS

For METAL and GLASS TUBES



FOR GLASS TUBES
 No. 102—10 for.....\$0.09

S. G. CAP ADAPTER

Lower portion, fit new metal tube caps while your old style S. G. cap slips over the top portion.

No. 77—Each.....\$0.08



FOR METAL TUBES

S. G. cap—new style for metal tubes, with lug.

No. CS-90T—Each.....\$0.03

DUAL S. G. CAP

For both types—one end fits metal tubes—other fits glass tubes. Molded bakelite body.

No. 9091—Each.....\$0.12

No. 9091I—With 15 in. high quality tin-sel copper insulated lead. Each....\$0.18

RUBBER GROMMETS AND FIBRE WASHERS



FLAT FIBRE WASHERS

No.	O. D.	Hole Size	Price
No. 88—5/16	No. 6—No. 8		10 for
No. 89—3/8	No. 8—No. 10		\$0.07
No. 90—7/16	No. 10— $\frac{1}{4}$ in.		
No. 91—1/2	No. 1—4-5/16		

SHOULDER FIBRE WASHERS

No.	O. D.	Hole Size	Price
No. 92—5/16	No. 6		10 for
No. 93—3/8	No. 8		\$0.10
No. 94—7/16	No. 8—No. 10		
No. 95—1/2	No. 1—4-5/16		

RUBBER GROMMETS

No.	I. D.	Mounting Hole	Price
No. 96—3/16	5/16		10 for
No. 97—1/4	1/2		\$0.10
No. 98—3/8	1/2		10 for
No. 99—7/16	9/16		\$0.15

RUBBER GROMMET ASSORTMENTS

Grommets are soft pure gum. They are for $\frac{1}{8}$, $\frac{1}{4}$, $\frac{3}{8}$, $\frac{7}{16}$ and $\frac{1}{2}$ in. holes.
 No. RGA—12 grommets.....\$0.15
 No. RGB—30 grommets......30



INSULATED BUSHINGS

$\frac{3}{4}$ -INCH
DIAMETER,
INSULATED



No.	Size	Each	Price
No. 74— $\frac{1}{4}$ in. high.		Each.....	\$0.03
No. 75— $\frac{3}{8}$ in. high.		Each.....	.03
No. 76— $\frac{1}{2}$ in. high.		Each.....	.04
No. 77— $\frac{3}{4}$ in. high.		Each.....	.04
No. 59—1 in. high.		Each.....	.05

BRASS SHAFT COUPLINGS, REDUCERS AND EXTENDERS



No.	Long	I. D.	O. D.	Price
25-75	$\frac{3}{8}$ in.	$\frac{1}{4}$ in.	$\frac{3}{8}$ in.	Each \$0.05
Above is a dial bushing				
C250	$\frac{3}{4}$ in.	$\frac{1}{2}$ in.	$\frac{1}{2}$ in.	.09
C375	$\frac{3}{4}$ in.	$\frac{1}{2}$ in.	9/16 in.	.09
C75-50	$\frac{3}{4}$ in.	$\frac{3}{8}$ in.	9/16 in.	.09
R50-50	$1\frac{1}{8}$ in.	$\frac{1}{2}$ in.	$\frac{1}{2}$ in.	.09
R50-75	$1\frac{1}{8}$ in.	$\frac{1}{2}$ in.	9/16 in.	.09
R750	$1\frac{1}{8}$ in.	$\frac{1}{2}$ in.	$\frac{1}{2}$ in.	.09
E254	$1\frac{1}{4}$ in.	$\frac{1}{2}$ in. I. D.	$\frac{1}{2}$ in. O. D.	.12
E255	$1\frac{1}{4}$ in.	$\frac{1}{2}$ in. I. D.	9/16 in. O. D.	.12
E256	$1\frac{1}{4}$ in.	$\frac{1}{2}$ in. I. D.	$\frac{1}{2}$ in. O. D.	.12

C—Coupling; R—Reducer; E—Extender.



DUAL GRID STUD

For Analyzer Plugs
 Modernizes old analyzer plugs to accommodate both glass and metal tube caps. Solders to grid wire of any analyzer cable.
 No. SMGD—Each.....\$0.06

OCTAL GRID LUG

For Analyzer Plugs
 Modernizes old analyzer plugs having two grid studs. Replaces one of two regular studs for accommodating new small grid clips used on metal tubes.
 No. SMGO—Each.....\$0.06



MACHINE SCREWS

Steel—Nickel Plated
 We stock round heads only.



Size	12 for	Size	12 for
$\frac{1}{4}$ x 4-36	\$0.03	2 x 6-32	\$0.05
$\frac{3}{8}$ x 4-36	.03	$\frac{1}{4}$ x 8-32	.03
$\frac{1}{2}$ x 4-36	.03	$\frac{3}{8}$ x 8-32	.03
$\frac{3}{4}$ x 4-36	.03	$\frac{1}{2}$ x 8-32	.03
1 x 4-36	.03	$\frac{5}{8}$ x 8-32	.03
$\frac{1}{4}$ x 6-32	.03	$\frac{3}{8}$ x 8-32	.03
$\frac{3}{8}$ x 6-32	.03	1 x 8-32	.04
$\frac{1}{2}$ x 6-32	.03	$\frac{1}{4}$ x 8-32	.04
$\frac{3}{4}$ x 6-32	.03	$\frac{1}{2}$ x 8-32	.05
1 x 6-32	.03	$\frac{3}{8}$ x 10-32	.04
$\frac{1}{4}$ x 6-32	.04	$\frac{1}{2}$ x 10-32	.05
$\frac{3}{8}$ x 6-32	.04	$\frac{3}{4}$ x 10-32	.05
$\frac{1}{2}$ x 6-32	.04	1 x 10-32	.05



BRASS, NICKEL PLATED HEXAGON NUTS

Size	10 for	Size	10 for
4-36 x $\frac{1}{4}$	\$0.03	6-32 x $\frac{5}{16}$	\$0.05
6-32 x $\frac{1}{4}$	.03	8-32 x $\frac{5}{16}$	.05
8-32 x $\frac{1}{4}$	.03	10 x 32 x $\frac{3}{4}$	.07

THREADED BRASS ROD

Size	Price
6/32—12-inch lengths.....	\$0.10
8/32—12-inch lengths.....	.10
10/32—12-inch lengths.....	.12

MACHINE SCREW KITS

85 in box—Assortment of 20— $\frac{1}{4}$, 20— $\frac{3}{8}$, 15— $\frac{1}{2}$, 10— $\frac{3}{4}$, 10—1, Round head.
 Asst. No. 1—Round head 6-32 screws.
 Asst. No. 4—Round head 8-32 screws.
 Asst. No. 7—Round head 6-32 screws.
 Nuts and washers—100 in box.
 Each assortment.....\$0.30

WOOD SCREW KIT

Asst. No. 6—Round, flat and oval head, assorted sizes.
 Each assortment.....\$0.30



ROUND AND HEX. HEAD SELF-TAPPING SCREWS

Nickel Plated

Specify whether round or hexagon head wanted.

Size	No.	Price
$\frac{1}{4}$ in. x No. 6.....	10 for	\$0.08
$\frac{1}{4}$ in. x No. 6.....	10 for	.08
$\frac{1}{4}$ in. x No. 6.....	10 for	.08
$\frac{1}{4}$ in. x No. 8.....	10 for	.10
$\frac{1}{4}$ in. x No. 8.....	10 for	.10
$\frac{1}{4}$ in. x No. 8.....	10 for	.12
1 in. x No. 8.....	10 for	.12
1 in. x No. 10.....	10 for	.12
1 in. x No. 12.....	10 for	.14

SHAKE-PROOF WASHERS

No.	Size	Price
No. 6-32.....	20 for	\$0.09
No. 8-32.....	20 for	.09
No. 10-32.....	20 for	.09



FAHNESTOCK SPRING CLIP

Very good quality.
 No. 41— $\frac{3}{4}$ -inch long.....12 for \$0.11
 No. 42—1-inch long.....10 for .11

SPAGHETTI

Flexible varnished tubing. Red, black, yellow, green.
 No. C68—For 16 and 18 gauge wires—30-inch lengths. Each.....\$0.06
 Ten for \$0.55
 No. C24—For 12 and 14 gauge wires—30-inch lengths. Each.....\$0.08
 Ten for \$0.75



SQUARE BUS BAR WIRE

No. CBB—No. 14 square tinned copper—24-inch lengths. Each.....\$0.08

"NET PRICES"

ACCESSORIES

INSULATED PLUG-IN PRONG

Solderless connection. Real contact.
No. 131.....\$0.07

INSULATED PLUG-IN PRONG JACK

with shoulder washer and terminal lug.
No. 136.....\$0.06



LONG TEST-PROD HANDLE

Solderless, insulated. Needle point.
No. 145—5½ ins. long.....\$0.15

PLUG-IN PRONG TEST PROD

4-inch handle; solderless connection.
No. 134\$0.15

PLUG-IN TEST PROD

2½-inch handle; solderless connection.
No. 135\$0.12

INSULATED PLUG CONNECTOR

1½ inches long; very handy for extending leads, etc.
No. 144.....\$0.09

INSULATED TAPERED PLUG

No. 133... ..\$0.08

Banana type plugs fit into end.
No. 130.....\$0.08

INSULATED SOLDERLESS PHONE-TIP PLUGS

Fit all standard tip-jacks, etc.

Junior—1½ ins. long.
No. 142. Each.....\$0.07
Senior—2½ ins. long.
No. 141. Each..... .07
Needle Point—1½ ins. long.
No. 132. Each..... .06

INSULATED PHONE-TIP JACK

Has strong sure-grip. Head 7/16-inch wide.
No. 138—Each\$0.06

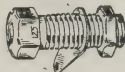
BANANA PLUG AND TIP TYPE JACK

Mounts in ¼ in. hole. Insulated. Takes both banana plugs and phone tips.
No. 148.....\$0.09

All units listed above can be had in red, black, yellow, green or blue.

PLUG-IN PRONGS

(Banana Plugs)
1½ ins. long.
No. 120. Each..\$0.04
Ten for 35



PLUG-IN PRONG JACKS

For banana style plug-in prongs.
No. 125. Each.....\$0.04
Ten for 35

PHONE PIN TIP JACKS

Mount in ¼-in. hole on panels up to ¾-in. thick.
No. 137—Each\$0.04
Ten for 35



SOLDERLESS PHONE TIPS JUNIOR

1½ in. long. No. 9. Ea...\$0.03

SOLDERLESS PHONE TIPS SENIOR

1½ in. long. No. 10. Ea...\$0.04

EASY SOLDERING PHONE TIPS

Insert wire and drop solder in hole. Brass, nickel plated. 1 in. long.
No. 20—10 for.....\$0.10

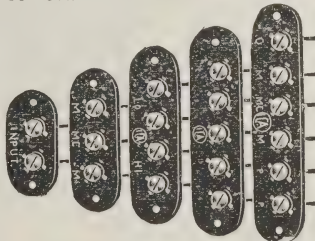


INSULATED BINDING POST

Takes banana plug in top and phone tip in side as illustrated. Non-removable top. Available in black, red, green, blue and yellow.
No. 143—Each.....\$0.09

ICA TERMINAL STRIPS

ICA Terminal Strips are specially adapted for amplifiers, mixing panels, radio sets, short-wave radio sets and other uses. Made of black heavy bakelite with specially designed nickel plated phosphor bronze screw terminals with non-removable collars.



No.	Size	Description	List
2402	1x4¼"	6 Post Strip, marked 1, 2, 3, 4, 5, 6.....	\$0.30
2404	1x3¾"	6 Post, no marking..	.30
2405	1x4"	6 Post, no marking..	.27
2406	1x4"	5 Post, marked 1, 2, 3, 4, 5.....	.27
2408	1x3½"	4 Post Strip, marked 1, 2, 3, 4.....	.21
2413	1x3¼"	4 Post, no marking..	.21
2414	1x2¾"	3 Post, no marking..	.15
2415	1x2¾"	3 Terminal Strip, marked 1, 2, 3.....	.15
2417	1x2"	2 Terminal Strip, marked Input.....	.12
2418	1x2"	2 Terminal Strip, marked Output.....	.12
2419	1x2"	2 Terminal Strip, marked A and G for Antenna and Ground.....	.12
2420	1x2"	2 Terminal Strip—plain, no marking...	.12
2425		Terminal lugs only..	.02

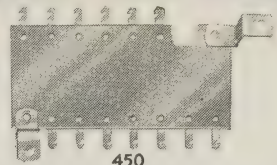
BAKELITE CASE

As illustrated

Size 5¼x2¾x6½ inches. Diameter of cut-out, 3¼ inches. Ideal for mounting meters, microphones, etc.\$0.60



BAKELITE TERMINAL PLATES



No. 420—Has six terminal lugs on each side for ½ watt resistors spaced 7/16 in. apart. Made of 1/16 in. bakelite stock size 1x3 inches.
No. 430—For assembly of 1 watt resistors or small tub condensers to facilitate chassis assemblies. Has four terminal lugs on each side spaced ½ in. apart and is drilled at ends for mounting with 6-32 in. screws. Made of 1/16 in. sheet bakelite 2x2½ inches.
No. 450—Has seven terminal lugs on each side and is supplied with "Z" brackets with ¼ in. stand-off from chassis. Made of 1/16 in. bakelite stock size 1¼x3¼ inches.
No. 420—Terminal Plate. Price....\$0.12
No. 430—Terminal Plate. Price..... .15
No. 450—Terminal Plate. Price..... .18

BAKELITE TIE POINTS



Tinned lugs mounted securely on laminated bakelite strips. Ideal for mounting parts, etc.

No.	No. of Brackets	No. of Lugs	Inches Length	Price
11BT	1	1	½"	\$0.05
21TBT	1	2	1"	.06
B3TB	2	3	1¾"	.08
B4TB	2	4	2½"	.09
B6TB	2	6	2½"	.10
B6TB	2	6	2½"	.11

BOOKS



RCA-VICTOR SERVICE NOTES

No. 1—1923-28.
No. 2—1929-30.
No. 3—1931-32.
No. 4—1933.
No. 5—1934.
Each\$1.25

THORDARSON TRANSFORMER MANUALS



Very complete information on circuits—many diagrams.
No. T344—Xmr. Guide \$0.09
No. T345—Sound Manual..... .09

No. T342—Service Men's Guide..... .06
No. T340—All three books combined into one complete manual with strong cover. Per set\$0.30

HAMMARLUND SHORT-WAVE MANUAL

16 pages—Instructive information for beginners, illustrated.....\$0.10

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We will be very happy to send you factory literature on any line. Many of these factory circulars contain a veritable fountain of technical information. If you prefer we will send you an assortment of these bulletins. Tell us what you want—it's all FREE!

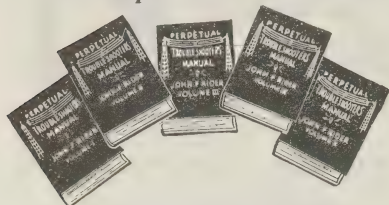
"NET PRICES"

MANUALS - BOOKS - MAGAZINES

If you are interested in securing full particulars on any line, we can send you the factory pamphlets, free.

RIDER'S MANUALS

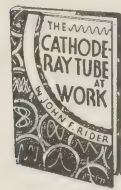
Important News!



Rider's Manual Vol. 6 will be off the press on or about December 5th and we will have them in stock by December 10th. 1,240 pages—all the late sets. Price \$7.50

Always In Stock

Volume No. 1—1925 to 1931 radios.....\$7.50
Volume No. 2—1931-1932 radios.....\$6.50
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Volume No. 4—From June, 1933, to spring 1934, radios.....\$7.50
Volume No. 5—From spring, 1934, to summer, 1935, radios.....\$7.50



THE BOOK YOU HAVE BEEN WAITING FOR

320 pages. Theory on Cathode Ray tubes and Cathode Ray circuits. The 2nd half of the volume is devoted to specific and practical applications of commercial oscilloscopes to servicing and adjustment problems. Price \$2.50—and worth it!

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Everyone of these books covers their subjects in fullest detail.
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PRACTICAL TESTING SYSTEMS—160 pages.....\$1.00
SPECIALIZED AUTO RADIO MANUALS—
Vol. 1—350 pages.....\$3.50
Vol. 2—416 pages.....\$3.50

GHIRARDI'S MODERN RADIO SERVICING 1,300 Pages

The new revised edition of Ghirardi's famous "Radio Servicing Course." Packed full of new ideas, the latest tips, the most up-to-date methods used by successful technicians. Written in easy-to-understand language—illustrated with hundreds of diagrams and charts. One of the first radio textbooks to contain a complete explanation of the construction and the use of Cathode Ray Oscillographs in radio service work. Contains complete descriptions and illustrations of latest 1935 testing instruments and servicing methods. Table of intermediate frequencies for all superhets. Trouble-shooting table of Symptoms and Remedies for over 500 different receivers. 1935 auto radio installation and servicing. Complete data on noise and interference elimination. Price \$4.00

Field Service Data Book
Supplement to above. Handy for tabular service data on trouble symptoms and remedies for popular receiver models. Contains servicing data and many other useful charts, diagrams and tables. Price \$1.50
SPECIAL COMBINATION OFFER. Save money by buying Modern Radio Servicing and Field Service Book together at only\$5.00

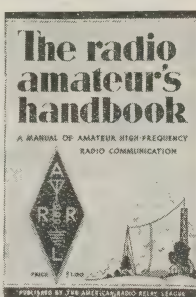
BOOKS AND SUPPLIES



1936
HAND-
BOOK
\$1.00

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The NEW 1936 League Handbook—(13th edition)—enlarged in every respect—over twice as large as previous issues—everything that's new in Amateur Radio thoroughly covered. Not just a reprint of older issues but BRAND NEW dope on everything. The most Radio Wisdom you can get any place—only.....\$1.00



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Ingenious devices for rapid, accurate and simple solution of various mathematical problems which arise in all kinds of radio work. Read direct answers without formulas and computations. Full instructions printed on back side of each calculator.

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Type C—Wire data calculator......50
Type D—Decibel calculator......50
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Type F—Resistance calculator. Make an ohm-meter of your voltmeter.....\$0.50



EVERY HAM SHOULD HAVE ONE!

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Prepare to pass commercial radio exams this direct, easy way. 388 pages with over 600 typical questions and answers that are apt to be asked in government exams. Full illustrated answers make you confidently familiar with the essentials of all license tests, both commercial and amateur.



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Voltage Tables for Broadcast Receivers F. L. Sprayberry

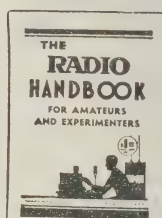
Over 300 pages with more than 1,500 complete voltage tables on broadcast receivers made in U. S. from 1927 to spring, 1935. Cross indexed. Tells exactly what voltage should be at each prong of the socket. Also information on Voltage Method of Radio Analysis. A book you should have \$2.00



Entirely New! Latest 1936 Edition

A Handbook by the technical staff of the great magazine "RADIO." More than 300 pages. 64 pages of Radiotelephone data, including Controlled Carrier Modulation. Tells how to design, build and operate any kind of a c. w. or phone transmitter from 10 watts to a kilowatt.

64 pages of new receiver data, with details for building any kind of short-wave receiver from a one-tube to a 12-tube crystal superheterodyne. 48 pages of latest 5-meter data, including design of four new 5-meter superheterodynes. Also data on building one-tube beginner's transceivers. 22 pages of new Antenna data, directional antennas, etc. Many chapters on radio theory, transformer and choke design, all the new Low-C tube information. Audio and other sound system design facts. Many tables, charts, curves, etc.\$1.00



"5 METER RADIOTELEPHONY"

By Frank Jones

Very complete on all kinds of 5-meter rigs. Lots of diagrams. Each.....\$0.25

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A practical book—how to master the code, get a license, get on the air. Absolutely up-to-date—all new circuits—includes 5-meter information.....\$0.25

MAGAZINES

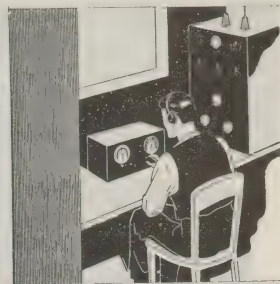
QST—Every month.....\$0.25
"RADIO"—Get a "Radio" once and you'll want it every month.....\$0.30
R-9—A "newsy" magazine......25
"SERVIC"—Every serviceman should read it every month.....\$0.25

AMATEUR

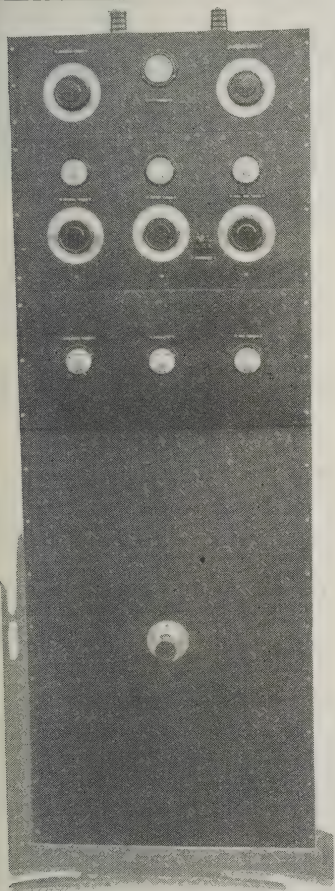
AND

SHORT WAVE EXPERIMENTERS'

SUPPLIES



"The Friendly Ham Supply House"



W9LIP—Phone and C. W. Transmitter operating on 3985 K. C., 3880 K. C., and navy frequencies. R. F.—2A5 Xtal; RK20 Buffer and Eimac 150T final. Speech—P. P. 57's—53-53—P. P. 2A3's and 838's in Class B. Astatic D104 mike used.

Assistant "Ops."

Ward Jensen W9TLE
Ben Miller W9DKL
Art Kaseth W9HOP
Les Grube W9LEX
Roy Hedlin W9HRH

Attention, All Hams!

ST. PAUL RADIO CLUB holds its meetings the first Friday of each month at the Hotel Lowry.

MINNEAPOLIS RADIO CLUB holds its meetings the second Thursday of each month at the West Hotel. All visiting and local amateurs welcome.

Here we are again—with our 1936 catalog. We won't rave about this being the most complete catalog in lines that Hams and Experimenters really want—we'll leave it to you. An inspection of this catalog should prove to you that the Lew Bonn Co. is your best **source of supply**. Naturally—we have everything **in stock** that you see listed. Our business quarters have been increased 300% and our inventory 200% in the last year—so our **"Day's Quicker Service"** really means what it says. We honestly believe that there isn't a larger stock of Ham parts in this country.

The same policy of "no job lots" at Lew Bonn's still holds true. Our prices on standard lines are the lowest offered anywhere. Everything carries the effective Lew Bonn Co. guarantee—"Satisfaction guaranteed or your money refunded cheerfully—no strings attached." No red tape to unwind. Just send back the article or articles that don't please you and send a letter (don't enclose letter in the package, please), and we will immediately rebate or issue a credit memo. You are also assured of a cash rebate right along with your order if you send in too much money for a shipment. No waiting—you get the rebate at once.

As usual, we have proven again to be **the Ham Supply House** most willing to show you our appreciation for your business. Since our last catalog was mailed (Oct. 1st, 1934), I have attended the following conventions and Hamfests:—Pierre, S. D.; Mankato Hamfest and Mankato Field Day, Henning and the great Mid-American, Mpls., in Minn.; Clinton, Des Moines and Sioux City, Ia.; Fond du Lac and Milwaukee, Wis.; Lake Bluff (W9PZ) and Aurora, Ill.; and Marquette, Mich. At nearly all of these affairs, the Lew Bonn Co. proved its right to the slogan, "The Friendly Ham Supply House" by donating the grand prize. Due to many conventions falling on the same dates, we missed out on the Tri Cities (Moline-Davenport-Rock Island); Burlington, Iowa; and Rockford, Ill., affairs. Very nice prizes were sent to them and it was with great regret that we couldn't be there.

All in all, fellows, we've been an outstanding example of a wholesaler who really co-operates. So, when you need some more radio apparatus take this catalog and compare our prices with our competitors. When you find, as you surely will, that our prices are always in line—and you **know** it's not job-lot junk—and you **know** that the service will please—and you think of that good old Lew Bonn Co. guarantee—you can send that order in to us and say to yourself, "I'm glad I could show the Lew Bonn Co. that Hams do appreciate the swell things they have done for amateurs."

We wish to point out also that this is the **first really genuine 1936 catalog** you have received. You will find new items not listed in other catalogs and you will find differences in prices. You can bank on it, fellows, that these prices are right and are the prices **NOW** in effect.

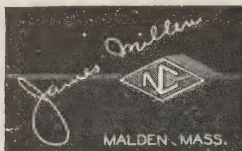
I want to thank you for your patronage and assure you again of our most full-hearted efforts to please you.

(73)

Rex L. Munger

W9LIP Sales Engineer.

The next great Mid-American and Dakota Division Convention will be held in St. Paul, Minn., at the Hotel Lowry, probably the first week in May—1937. It's a year and a half away—but start planning on it—Hamdom's greatest convention!



NATIONAL RADIO PRODUCTS

The New Improved Models

FB7-A

FB7-A—OUTSTANDING FEATURES

- High Selectivity and Sensitivity.
- Electron Coupled Oscillators—No Frequency Drift.
- Uniform Gain over Entire Frequency Range.
- Double Shielding.
- Absolute Single Control Tuning—No Trimmer.
- Two I. F. (High Gain) Stages.
- New NATIONAL Type AGS air tuned, Litz wound I. F. Transformers with trimmer adjustments on top.
- Tuning Curves on Front Panel.
- Gain Control Calibrated in "R" Units.
- High Signal to Noise Ratio.
- One-Hand Tuning.
- Front of Panel Coil Change.
- Shielded "R39" Coils Changed from Front of Panel.
- S. F. L. 270° Tuning with Full Vision Velvet Vernier Dial.
- Seven tubes without Rectifier.
- Panel Switch for cutting B Voltage during Transmission.
- Band Spread and Full Range Coils.
- Amateur Bands Spread over 100 Dial Divisions.
- Full Range 34 m.c. to 1,500 k.c.
- "Offset" c.w. Beat Tuning.
- Beat Oscillator Switch on Panel.
- Phone Jack in 2nd Detector Output Circuit.
- Speaker Driven by '59 as Class "A" Pentode.
- Mechanical Filter (Quartz Crystal) Available for Full Single Signal Reception.
- "Doubtlet" or standard type Antenna System.

The FB7-A is a seven-tube receiver having exceptional sensitivity, selectivity, and stability. Ample sensitivity and selectivity are assured through the use of a circuit employing two stages of high gain I. F. amplification (six tuned circuits). There is no pulling in or blocking by strong local signals and frequency drift in both high frequency and beat oscillators has been eliminated.

The receiver is compact, being only 11½x12 ins.

The full vision dial, plug in coils, send and receive switch, beat oscillator switch, calibration chart, etc., **all on the front panel**, result in an ease and convenience of operation that is possessed by no other receiver.

FB7-A with air dielectric condensers in I. F. Amp.—completely wired—less coils—less tubes—your net cost

\$37.50

TUBES—one 56, one 57, two 58's, one 59 and two 24's—

Raytheons—Your net cost

\$4.21

FBXA

FBX-A has all the fine features of the FB7-A and in addition has a Crystal Filter working in the tried and proven Jim Lamb, Single-Signal Circuit. Adds extreme selectivity and reduces noise ratio. Crystal filter controls on side. Same general design as FB7-A and uses same tubes; without tubes, power supply, speaker or coils.

Your net cost.....

\$51.90

FB7 COILS

Air Padded Osc.

Catalog No.	Range
AB 20—20 Meter Band Spread.	
AB 40—40 Meter Band Spread.	
AB 80—80 Meter Band Spread.	
AB 160—160 Meter Band Spread.	
FB AA—34,000 to 18,000 Kc.	
FB A—19,500 to 11,400 Kc.	
FB B—11,700 to 7,000 Kc.	
FB C—7,300 to 4,000 Kc.	
FB D—4,200 to 2,400 Kc.	
FB E—2,500 to 1,500 Kc.	
FB F—1,500 to 900 Kc.	
All types—	
Per pair.....	\$6.00

NATIONAL AMATEUR



RADIO RECEIVER

Three Models

AC uses 2-58, 1-56. DC uses 2-6D6, 1-76. DC uses 2-32, 1-30. 1 Stage R.F., Regenerative Detector and 1 Stage Impedance Coupled Audio.

There are more SW-3's in Ham Shacks than all other factory-made receivers combined. Real Sock! Extra Selective!

Your net cost **\$19.50**

Completely Wired. Less Coils, Less Tubes
Size 9x9 ¾x7 ins.

SW-3 COILS AND COIL FORMS

"60" SERIES

For National AC-SW-58, DC-SW-34, and AC-SW-3 Thrill Boxes.

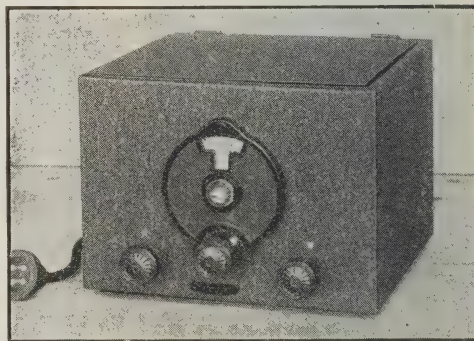
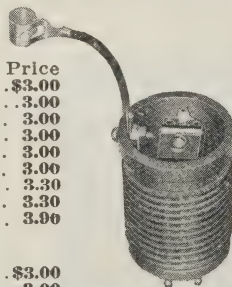
GENERAL COVERAGE COILS

Catalog Symbol	Range	Price
No. 60—9. to 15. meters		\$3.00
No. 61—13.5 to 25. meters		3.00
No. 62—23. to 41. meters		3.00
No. 63—40. to 70. meters		3.00
No. 64—65. to 115. meters		3.00
No. 65—115. to 200. meters		3.00
No. 66—200. to 360. meters		3.30
No. 67—350. to 550. meters		3.30
No. 68—500. to 850. meters		3.90

BAND SPREAD COILS

Per Set of Two.

No. 60A—10 meter band	\$3.00
No. 61A—20 meter band	3.00
No. 63A—40 meter band	3.00
No. 64A—80 meter band	3.00
No. 65A—160 meter band	3.00



SW-3

POWER SUPPLIES For All National Receivers

National No. 5887AB, 180 volts "B" and Filament Voltages (for FB7-A)	\$14.70
National No. 5897AB, 250 volts "B" and Filament Voltages (for FB7-A)	\$15.90
National No. 5886, 250 volts "B" and 6.3 Filament Volts	\$20.70
Bonn "Special" Power Unit, 250 volts "B" and Filament Voltages. Can be had in 2.5V. or 6.3V. In black metal can	\$10.50

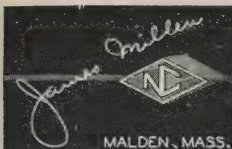
National NCC-10, all steel cabinet, for SW-3 coils

\$2.25

We carry a complete stock of the "10" series coils, both band-spread and general coverage for older model SW-3 and SW-5. Per pair.....

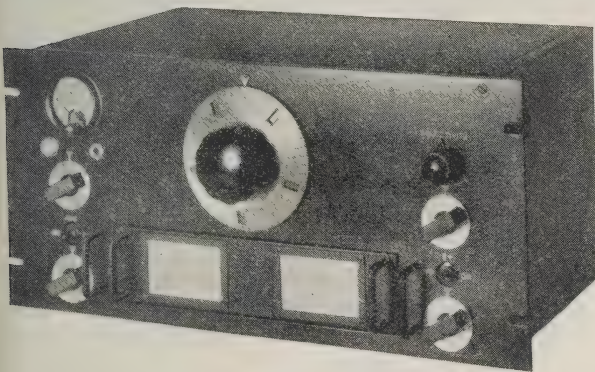
\$3.00

"NET PRICES"



NATIONAL RADIO PRODUCTS

NEW HRO DE LUXE NATIONAL ^{High Frequency} RECEIVERS



OUTSTANDING FEATURES

- Nine Tubes, not including rectifier.
- Two preselector stages.
- Single Signal (Crystal Filter) standard equipment.
- Ganged Plug-in coils, with each coil individually shielded.
- Strictly single-control Tuning.
- Calibration for each range mounted on coil.
- Four gang precision condenser, with preloaded worm-drive tuning, 20-1 ratio.
- Micrometer dial, spreading tuning over 500 divisions, numbered every 10 divisions, direct reading.
- Automatic or Manual Volume Control.
- Vacuum Tube Voltmeter with Instrument calibrated in R scale of carrier intensity.
- Electron Coupled, air padded oscillators.
- Two I. F. stages with Litz-wound coils, air condenser tuned.
- Beat Frequency Oscillator for "Offset" C.W. Tuning.
- Phone Jack on Panel.
- Relay rack mounting available.

Tubes Used: 2½ volt type—4-58, 3-57, 1-2B7, 1-2A5.
6.3 volt type—4-6D6, 3-6C6, 1-6B7, 1-42.

HRO—Amateur Receiver—table model—complete with coils to cover 1.7MC to 30MC and with full set of laboratory matched tubes (2½ V.) but without power supply and speaker\$167.70

(Supplied with 6.3 volt tubes if specified but not recommended for A.C. operation.)

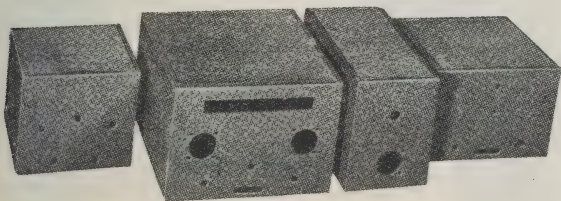
HRO—In relay rack type—complete as listed above.
Price\$179.70

Power Supply

National 5897 for 2.5 volt Model HRO—2.5 volt filament and 250 volts "B".....\$15.90

Extra Coils

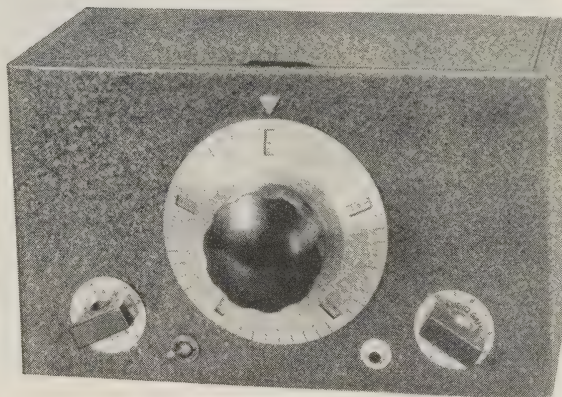
175KC to 400 KC.....\$16.50
500KC to 1,000 KC.....12.00
900KC to 2,000KC.....12.00



C-SRR—Size 7¼x7¼x7 ins.\$2.10
C-FB7—Size 12x11½x8 ins. 4.20
C-PSK—Size 5x12x8 ins. 3.60
C-SW3—Size 9¼x9x7 ins. 3.30

All of these metal cabinets can be had undrilled.
Sub-panel is included.

NATIONAL "ONE-TEN" ULTRA H. F. RECEIVER



An improved super-regenerative circuit with one R. F. stage using 2 acorn tubes and 2 metal tubes covering the ultra H. F. bands completely from one to ten meters. Tubes required: 1—954, 1—955, 1—6C5, 1—6F6.
Type 110 Receiver with coils but without tubes, speaker or power supply\$28.50
Type 5886 Power Supply.....15.90

Ultra H. F. Tuning Unit

Used in 110 Receiver. Includes HRO type dial—two-section variable condenser—coil and tube sockets—assembled but does not include tubes or coils.

No. PWC\$14.10

HRO JUNIOR RECEIVER

For those who need the high performance of the HRO, but do not require its extreme versatility, a Junior model is offered. The circuit details of both receivers are identical in every respect, but the lower priced model has been greatly simplified by omitting the crystal filter and the S-meter, and by designing coils for "continuous band spread" only.

Although these omissions do not greatly restrict its usefulness, they make it possible to price the Junior HRO at a very attractive figure. A complete description of the HRO Junior and of the Standard HRO will be mailed on request.

HRO Junior—With tubes, one set of coils, 10 to 20 meters (2 amateur bands). Amateur Net.....\$99.00

5897 AB Power Pack—for above—less tube. Amateur Net 15.90

Additional HRO Jr. Coils—per range—(2 amateur bands) 9.90

NATIONAL Type R-152 R. F. CHOKE

Isolantite insulation on metal base—10,000 volts insulation; continuous universal winding in 5 tapered sections; inductance 4 m.h.; distrib. cap, 1 mmf.; DC resistance 10 ohms; current ratings: continuous, 0.6 amp.; intermittent, 0.8 amp. For both high and low powered transmitters and laboratory oscillators. List price\$1.35



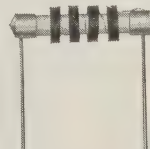
Type R-154—Like R-152 but designed for peak efficiency in 40 meter band.....\$1.35

NATIONAL ISOLANTITE SOCKETS



4-5-6-7 large and 7 small.
Each\$0.36

NATIONAL NO. 100 R. F. CHOKE



D.C. resist, 50 ohms,
dist. cap. 1MMF., 2½
MLH., 125 M.A....\$0.45
The fastest selling piece
of Ham apparatus made.

"NET PRICES"



NATIONAL RADIO PRODUCTS

NEW!

NATIONAL'S NEW LINE OF TRANSMITTING VARIABLE CONDENSERS

1000, 2000, 3000
Volts. Steatite - Iso-
lantite Insulation.

TYPE TMS

For Oscillators, Buffers, Doublers, Etc.

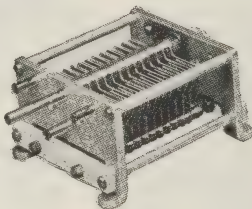
Cat. No.	Capacity	Length	Plates	Peak V.	Price
TMS-100	100 mmf.	2 3/4 in.	10	1000 v.	\$1.35
TMS-150	150 mmf.	2 3/4 in.	14	1000 v.	1.50
TMS-250	250 mmf.	2 3/4 in.	23	1000 v.	1.65
TMS-50 Dual	50-50 mmf.	2 3/4 in.	6-6	1000 v.	2.10
TMS-100 Dual	100-100 mmf.	2 3/4 in.	9-9	1000 v.	2.55

For Low C, Type 210 Amplifiers

TMSA-35	35 mmf.	2 3/4 in.	8	2000 v.	1.65
TMSA-50	50 mmf.	2 3/4 in.	11	2000 v.	1.80

TYPE TMC

For
Moderate
Power
Rigs



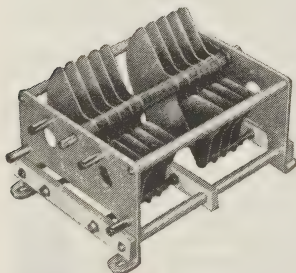
COMPACT

3,000 VOLTS

For RK18, RK20, RCA800, 830, 203A, 210, Etc.

Cat. No.	Capacity	Peak V.	Length	Plates	Price
TMC-50	50 mmf.	3000 v.	3 in.	7	\$2.40
TMC-100	100 mmf.	3000 v.	3 1/2 in.	13	2.55
TMC-150	150 mmf.	3000 v.	4 in.	21	2.85
TMC-100 Dual	100-100 mmf.	3000 v.	6 in.	13-13	4.50

Air gap—.077 inch



TYPE TMA

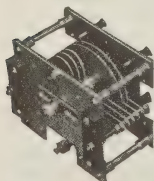
Rigid frame, arranged for mounting on panel, chassis or stand-offs. Plates are heavy aluminum, rounded and buffed edges. Insulation is Isolantite. Heavy duty.

Cat. No.	Capacity Mmf.	Peak Volts	Length	Plates	Price
TMA-300	300	3,000	4-9/16 in.	23	\$6.60
TMA-200D	200-200	3,000	6 in.	16-16	8.10
TMA-50A	50	6,000	4-9/16 in.	9	3.60
TMA-100A	100	6,000	6 in.	16	5.40
TMA-150A	150	6,000	6 in.	23	6.60
TMA-230A	230	6,000	9-5/16 in.	35	8.70
TMA-50DA	50-50	6,000	6 in.	9-9	6.00
TMA-100DA	100-100	6,000	9-5/16 in.	15-15	9.60
TMA-100B	100	9,000	9 1/4 in.	23	7.20
TMA-150B	150	9,000	12 1/2 in.	35	9.30
TMA-60DB	60-60	9,000	12 1/2 in.	15-15	10.20
TMA-50C	50	12,000	7 1/4 in.	13	4.35
TMA-100C	100	12,000	12 in.	27	6.60
TMA-40DC	40-40	12,000	12 in.	11-11	7.20

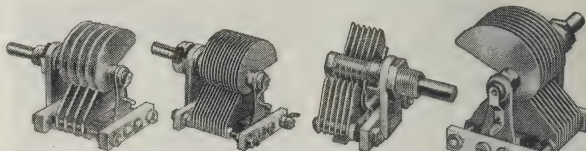
FREQUENCY METER CONDENSER

For amateur frequency meters and monitors. For use in high C circuit—no change in calibration when tube is changed. 100° dial spread.

Type 40-75.....\$3.30

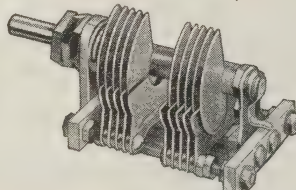


Standard H. F., Ultra H. F. Midget Condensers

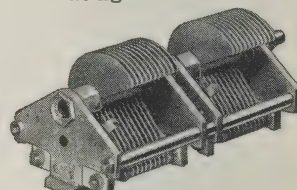


SEU		SEH		STS			SE	
Catalog Type No.	Capacity in Mmf.	Air Gap	Plate Shape	Rotor Plates	Stator Plates	Depth behind Panel	Price	
ST-	35	.35	.026	5	4	2 1/2"	\$0.90	
	50	50	.026	6	5	2 1/4"	1.08	
	75	75	.026	8	7	"	1.20	
	100	100	.026	10	10	"	1.35	
	140	140	.026	14	14	2 3/4"	1.50	
	150	150	.026	15	14	2 3/4"	1.50	
STH-	200	200	.0175	14	13	2 1/2"	1.65	
	250	250	.0175	16	16	2 3/4"	1.80	
	300	300	.0175	20	19	2 3/4"	1.95	
	335	335	.0175	22	21	2 3/4"	2.10	
STN-	18	18†	.065	4	3	1 3/8"	1.20	
STHS-	15	15	.0175	2	1	1 3/8"	.85	
	25	25	.0175	2	2	"	.90	
	50	50	.0175	4	3	"	.95	
STD-	50	50*	.026	6*	5*	2 3/4"	2.10	
STDH-	100	100*	.0175	7*	7*	"	2.70	
SE-	50	50	.026	6	5	2 3/4"	1.80	
	75	75	.026	8	7	"	1.95	
	100	100	.026	10	10	"	2.10	
	150	150	.026	15	14	2 3/4"	2.25	
SEH-	200	200	.0175	14	13	2 3/4"	2.25	
	250	250	.0175	16	16	2 3/4"	2.40	
	300	300	.0175	20	19	2 3/4"	2.40	
	335	335	.0175	22	21	2 3/4"	2.55	
SEU-	15	15	.055	3	3	"	1.50	
	20	20	.055	4	4	"	1.65	
	25	25	.055	5	4	"	1.65	
2SE-	100	100*	.026	10	10	5"	3.30	
2SEH-	200	200*	.0175	14	13	"	3.90	

*Per Section †3000 Volt Rating



STD (Double ST)

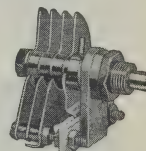


2SE

NEUTRALIZING CONDENSERS

TYPE STN

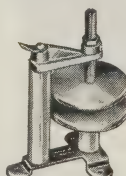
STN—An efficient, sturdy condenser suitable for neutralizing 245, 247, 210 and like tubes in any stage \$1.20



Type STN

TYPE 800

800—High voltage neutralizing condenser for use with the R.C.A. 800. Both plates insulated from ground \$1.80

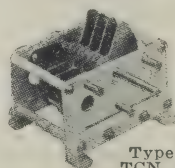


Type 800

Heavy duty, peak voltage 6,000 volts. Suitable for use with 203A, 852, 150T, etc. Max. cap. 25 Mmf.

\$2.10

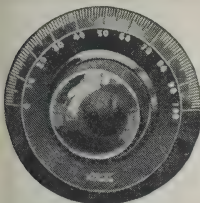
TYPE TCN



Type TCN



NATIONAL RADIO PRODUCTS

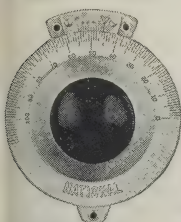
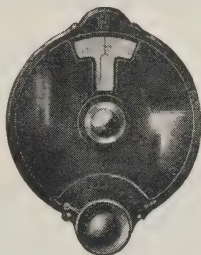


NATIONAL TYPE A VELVET VERNIER DIAL

No back-lash. Smooth 5 to 1 ratio. Available in 2, 3, 4 or 5 scale\$1.80

NATIONAL TYPE B DIAL
Variable ratio 6 to 1 to 20 to 1. Made of bakelite. Available in 1 or 5 scale. 4 in. diameter..\$1.65

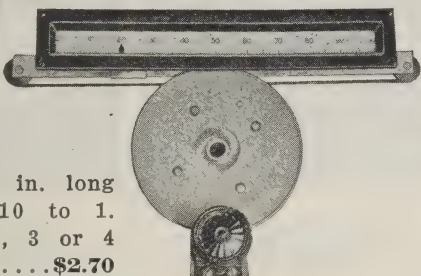
TYPE BM DIAL
3 in. diameter. Same as B dial but smaller and does not have variable ratio. Available in 1 or 5 scale.....\$1.50
Illuminators for B and BM dials.....\$0.30



NATIONAL TYPE N DIAL
Precision dials, vernier ratio 5 to 1. Available in 2, 3, 4 or 5 scale. 4 in. diameter.....\$4.05

NATIONAL TYPE VK DIAL

Full vision, 7 in. long scale. Ratio 10 to 1. Available in 2, 3 or 4 scale\$2.70



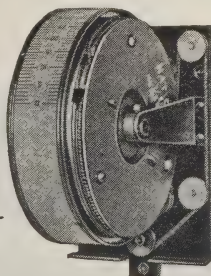
NATIONAL TYPE H DRUM PROJECTION DIAL

Ratio 10 to 1. Reflection color is green. Available in 1, 2 or 4 scale. \$3.30



TYPE E DIAL

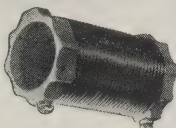
An old favorite. Ratio 10 to 1. Smooth action. Available in 1 or 5 scale\$1.65
Type 28 illuminator, extra.... .30



INFORMATION ON SCALES

Scale Types	Divisions	Degrees Rotation
1.....	0-100-0	180°
2.....	0-100	180°
3.....	100-0	180°
4.....	150-0	270°
5.....	200-0	360°

STEATITE TRANSMITTING COIL FORMS



Transmitting Types

For 20, 40, 80, 160 meter bands.

Threaded for No. 10 wire or smaller, low-loss

Cat. No.	Winding Diameter	Winding Length	Max. No. of Turns	Band	Price
XR-10	2 1/2 in.	3 3/8 in.	26	20-40	\$2.25
XR-11	3 1/2 in.	4 1/2 in.	34	80	3.90
XR-12	4 in.	5 1/4 in.	29	160	4.80

CERAMIC TRANSMITTING COIL FORMS

While not as low-loss as the Steatite Forms, these ceramic forms will work efficiently in all amateur transmitters. Same general specifications as Steatite models.

XR-10A—Same size as XR-10.....	\$0.90
XR-12A—Same size as XR-12.....	1.35

NATIONAL GRID CLIPS

Type 12—Fit 866's, large.....	\$0.06
Type 24—Regular size.....	.03
Type 3—For metal tubes.....	.03

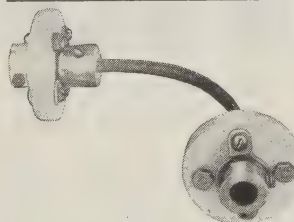


NATIONAL PADDING CONDENSER

Compact, only 1 1/4 in. diameter by 1 1/4 in. high.
W-75—75 mmf. (air).....\$1.35
W-100—100 mmf. (air).....1.50

TYPE M-30

Small mica padding condenser mounted on steatite. 1 1/8 in. long, 1/8 in. wide, 1/2 in. high.
M-30—30 mmf., mica.....\$0.21



FLEXIBLE SHAFT COUPLING

Hubs take 1/4 in. shafts. Works up to 90° angle. Plain and Isolantite.

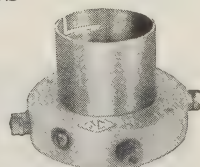
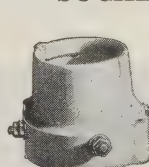
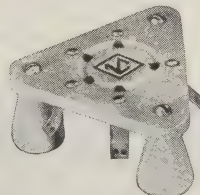
No. TX12—Isolantite hubs	\$0.75
No. TX11—Plain hubs....	.36

SHAFT COUPLINGS

No. TX-9—Steatite.....	\$0.60
No. TX-10—Bakelite.....	.33



SOCKETS



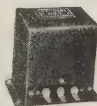
Type JX-100—For the new RK-28 and RCA 803 power pentodes. Isolantite.....\$2.15
Without stand-offs.....1.80

50 WATT SOCKETS

Type XC-50—All Steatite.....	\$2.10
Type XM-50—Metal shell.....	1.20

SCREEN GRID-DETECTOR COUPLING UNIT—TYPE S101

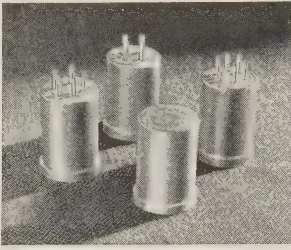
Used in coupling A S. G. detector to an audio stage\$3.30



NATIONAL COIL DOPE

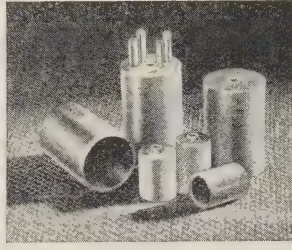
A special R.F. lacquer—Gives low power factor. Apply with brush; dries in air; no baking; real quality. Can.....\$0.90

USE NATIONAL PARTS



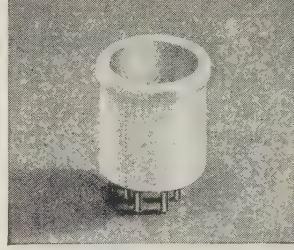
R-39 COIL FORMS

Made of R-39. Can be drilled and grooved easily. Size $2\frac{1}{4}$ in. high by $1\frac{1}{2}$ in. wide. Available in 4, 5 and 6 prong types. Type XR-4, XR-5 or XR-6. Each.....\$0.45



MIDGET COIL FORMS

Made of R-39 in two sizes. XR-1— $1\frac{1}{2}$ in. high by 1 in. wide, 4 prongs. Each\$0.30 XR-2— $1\frac{1}{2}$ in. high by 1 in. wide, without prongs. Each\$0.21 XR-3— $\frac{3}{4}$ in. high by $\frac{1}{8}$ in. wide, without prongs. Each\$0.15

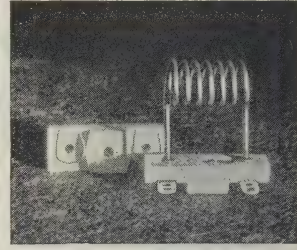


STEATITE COIL FORMS

Size $2\frac{1}{4} \times 1\frac{1}{2}$ inches.

Drilled for leads.

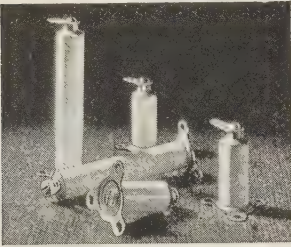
XR20-4—4 prongs. \$0.21
XR20-5—5 prongs. .21
XR20-6—6 prongs. .21



5 METER COIL

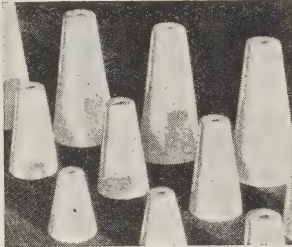
Base of steatite, copper wire windings. Size over all, $1\frac{3}{8} \times 1\frac{7}{8}$ in.

XR-9—Each\$0.27



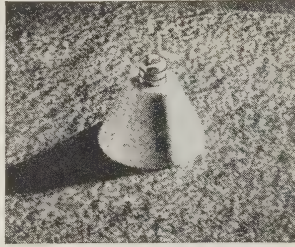
ISOLANTITE STAND- OFF INSULATORS

WGS-1— $1\frac{3}{8} \times \frac{1}{2}$ in. \$0.15
WGS-2— $2\frac{7}{8} \times \frac{1}{2}$ in. .21
WGS-3— $2\frac{7}{8} \times \frac{3}{4}$ in. .48
WGS-4— $4\frac{7}{8} \times \frac{3}{4}$ in. .60



STEATITE STAND- OFF INSULATORS

WGS-5— $1\frac{1}{4} \times 1 \times \frac{1}{2}$ in. Tapped 8-32 each end. Each\$0.15
WGS-6— $2 \times 1\frac{1}{2} \times \frac{5}{8}$ in. Tapped 10-24 each end. Each\$0.21
WGS-7— $3 \times 1\frac{1}{2} \times \frac{3}{4}$ in. Tapped 10-24 each end. Each\$0.39

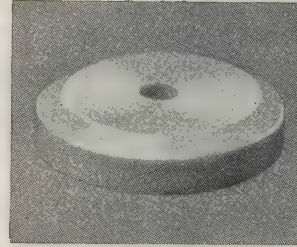


H. F. BUSHINGS— STEATITE

WXS-1 — $1 \times 1\frac{1}{8}$ in. Per pair\$0.36

WXS-2— $1\frac{1}{2} \times 1\frac{3}{8}$ in. Per pair\$0.48

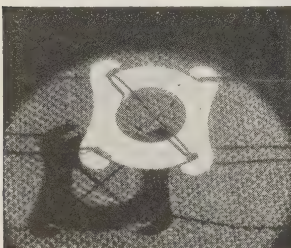
Hardware included.



H. F. BUSHING Made of Steatite

Button type. $\frac{3}{16}$ in. thick, $\frac{5}{8}$ in. diameter, $\frac{1}{8}$ in. hole through center. Ideal for running leads through chassis.

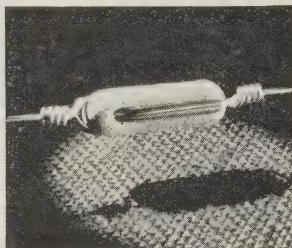
XS-6\$0.06



VICTRON TRANSPO- SITION BLOCK

Wafer-thin, these blocks have but a fraction of the weight of other blocks. Low-loss.

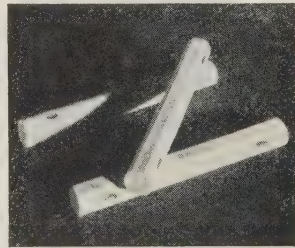
Type AA-1—Each..\$0.18



STEATITE STRAIN INSULATOR

Aircraft type. Very strong. Size $1\frac{1}{2}$ in. long by $\frac{1}{2}$ in. wide.

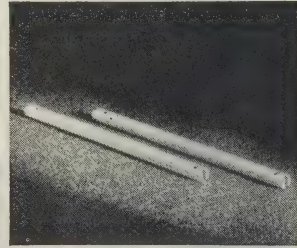
Type AA-5—Each \$0.11
5 for 54c



STEATITE ANTENNA INSULATOR

Real low-loss, eliminates power leakage and gets your signals out in the air.

Type AA-6—Size $4\frac{1}{4} \times \frac{1}{2}$ in. Each.....\$0.15



STEATITE SPREAD- ERS

Unusual in Efficiency
Steatite is a white ceramic material specially developed for H. F. circuits
Type AA-3—Each..\$0.11

5-Meter Equipment |

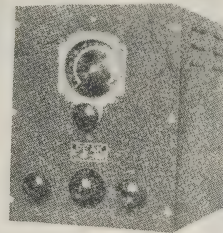
Pre-Selectors

BARR DB3 TRANSCEIVER

Class B Modulated

A complete, self-contained ultra H.F. radiotelephone transceiver that has proven to be one of the outstanding units on the market. Beautiful appearance. Output is 10 times more than that of units using only Type 30 tubes. Working range from 2 to 100 miles depending on conditions and elevation of locations. Size 11 in. long, 9½ in. high and 6½ in. wide. Black crackle finish metal case has heavy leather handle. Uses one 30, one 49 and one 19. Comes with complete instructions. Price does not include tubes, batteries, microphone or earphones.

No. DB3.....\$16.20



PEAK PRE-SELECTOR AND PRE-AMPLIFIER

Range 17 to 210 Meters

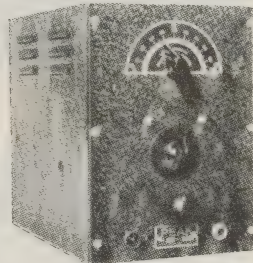
One of the most desirable pieces of amateur apparatus. If every amateur owning a Comet P-10, an FB-7, a PR-10 or good receiver of that type knew how the Peak Pre-Selector increases signal volume and reduces noise level, they would all own one. This wonderful unit incorporates such up-to-date desirable features as: band-change switch (no plug-in coils), electron coupled regeneration, self-contained filament supply, high quality parts, illuminated airplane dial and many other features. Absolutely rejects images. Uses two 58 tubes. Size 7¼x9¼x10 inches. Comes with complete instructions—less tubes.

No. P-S2.....\$19.80

PEAK LINEAR DETECTION RADIO-TELEPHONY MONITOR

For aural monitoring of any phone transmitter between 5 and 200 meters. Self-contained power supply. Uses diode detection in TUNED input circuit giving a distortion-free signal. Has provision for plugging in meter to register overload distortion and resonance. Audio distortion in any form, carrier hum, audio hum, etc., can be immediately heard. A necessity for proper operation of any phone station. Size 7¼x9¼x10 inches. Uses one 84 and one 85. Price complete except tubes.

No. P-MD.....\$19.80



PEAK Q5 ULTRA HIGH FREQUENCY SUPERHETERODYNE RECEIVER

The Peak Q5 is a 5-tube super for use on 2½, 5 and 10 meters. It incorporates all of the latest developments in ultra H.F. field and its results will amaze you. Has the sensitivity and selectivity of the superheterodyne but lacks the "hiss" found so objectionable in super-regenerative receivers. Three watts audio output. Has copper plated chassis, Isolantite insulation, A.V.C., two I.F. stages, smooth "oscillation detector" control, illuminated airplane dial, doublet antenna connections and variable coupling antenna coil. Can be used with either 2.5 or 6.3 volt tubes. Tubes used (2.5 volt): one 57, two 58, one 55 and one 2A5 or (6.3 volt): one 6C6, two 6D6, one 85 and one 42. Does not contain power supply and needs 250 volts D.C. at 50 M.A. Size 10x7x8 inches.

No. P-Q5—Less tubes.....\$21.60

PEAK X4 5-METER TRANSMITTER

10 Watt Carrier—100 Per Cent Class B Modulated

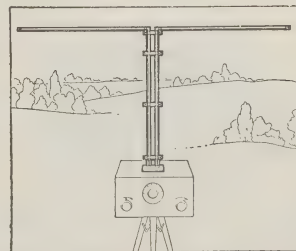
Uses one 76 first audio, one 6A6 second audio and one 6A6 in Class B. Oscillator is 6A6 unity coupled. Input circuit for single or double button carbon mike with mike current switch on front panel. Has D'Arsonval type meter with handy plug-in arrangement to read oscillator and modulator plate current. Size 8¼x19x7 inches. Fits standard racks.

No. P-X4—Less tubes and power supply.....\$29.70

No. P-X3P—Power supply delivers 300 volts D.C. at 200 M.A. and 6.3 volts at 3 amps. Comes in 8¼x19 in. metal container for rack mounting, less tube.....\$23.40

With the advent of spring, there undoubtedly will be some new 5-meter equipment introduced. You can rely on Lew Bonn Co. to be one of the first to have this equipment in stock at the lowest prices.

JOHNSON 5-METER "Q" ANTENNA



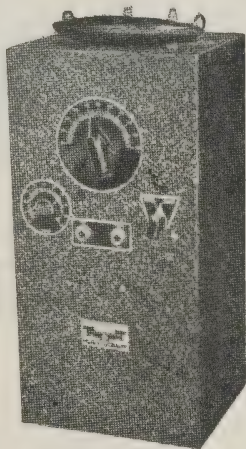
An extremely efficient antenna for 5-meter Xmters. or transceivers.
\$3.90

Complete with antenna and quarter-wave tubes and eight porcelain spacing bars. Write for bulletin on this if interested.

NEW RCA 5-METER TRANSCEIVER

A complete, readily portable 5-meter radiotelephone transceiver. Uses two 19, one 30 in a Class B circuit that gives maximum output with good quality. Strong, black crackle finish metal case, with heavy leather handle, carries all batteries. This new unit incorporates all the latest features and will give a very good account of itself in actual everyday use, as the workmanship is of the highest order and its construction is of the heavy duty type throughout. Requires three 45-volt "B's," one 7½-volt "C" and two 1½-volt "A's," batteries. Comes with complete instructions. Less batteries, tubes, microphone and earphones.

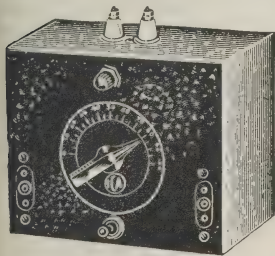
No. ATR-219.....\$19.95



QSO 5-METER TRANSCEIVER KIT

Assembled by us from such well-known lines as Hammarlund, Franklin, ICA, EBY, Johnson, etc. Two tubes used. "QSO" kit includes can as illustrated with chassis, both all drilled, and all parts except power supply, tubes, mike and earphones. Has diagram and full instructions.....\$8.95

Can be furnished for 2.0, 2.5 or 6.3 volt tubes.



OSCILLATORS

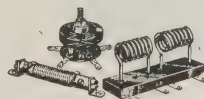
No. 1652—Inter-ruption Frequency Oscillator. Used in many 5-meter transceivers.

\$0.60



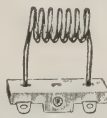
No. 1656—Shielded Interruption Frequency Oscillator for 5-meter work.
\$0.75

COILS FOR 5-METER TRANSCEIVERS



Complete.....\$1.35

5-METER COIL AND BASE



No. 1655—Kit of 5-meter coils. Includes 1 No. 1652, 1 No. 1653 and 1 No. 1654 as illustrated.....\$1.35
No. 1650—As illustrated, insulex base.....\$0.23
No. 1654—As illustrated above, two coils on one insulex base.....\$0.44
No. 1653—Special space-wound 5-meter choke.....\$0.36



NATIONAL TRANSFORMER

(Pickard type), antenna impedance matching. Type TRP.....\$1.50

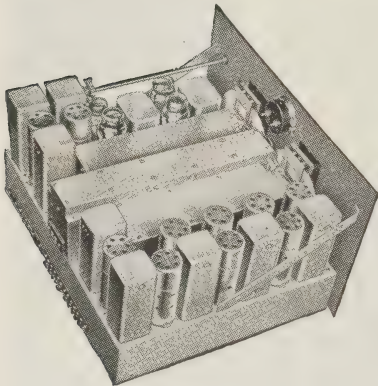
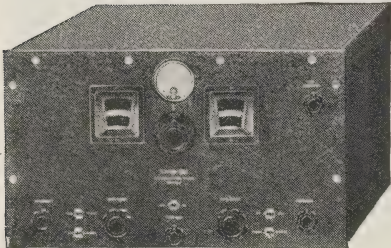
● Write in to us for special National Booklet on 5-meter equipment—FREE

"NET PRICES"

For Better Radio

HAMMARLUND

PRECISION PRODUCTS



LOOK OVER THESE OUT-
STANDING FEATURES

- *Uses FIFTEEN of the new type, Higher Efficiency Tubes.
- *It's an All-Band Receiver—Range is 15 to 560 Meters.
- *An efficient Front-of-Panel 5-Band Switch. NO Plug-In-Coils.
- *Band Spread Tuning on all Bands.
- *Volume and Radio Frequency gain are regulated by individual controls.
- *Switch for disconnecting B Supply when transmitting.
- *Both Dials Highly Illuminated.
- *Beat Oscillator Switch on front panel.
- *Calibration of Dial Settings to better than 1/2% accuracy.
- *Electro-static shielded input.
- *18 Watts of available undistorted audio output when needed.
- *Class A prime Push-Pull audio system.
- *Designed for use on doublet, "double doublet" or any standard antenna system.
- *Lower Noise Level.
- *Two stages of Radio Frequency pre-selector stages—no image interference.
- *Three high gain, high Q, i.f. stages giving high selectivity.
- *Automatic and manually operated Volume Control.
- *Crystal filter system supplied if desired at small additional cost.
- *Air-tuned R.F. Transformers throughout—High Q Circuit design.

HAMMARLUND "SUPER-PRO" RECEIVER

The leader in communication type receivers. Designed primarily for amateur, experimental and broadcast S. W. L. listeners, it also is one of the very best for straight broadcast reception. Read the many features—if you want the BEST, here it is! Range is from 15 to 560 meters. 18 WATTS UNDISTORTED AUDIO OUTPUT. No plug-in coils. Has specially designed band-change switch with silver plated multiple contacts—uses knife-switch principle. The two stages of radio frequency amplification use type 6D6 tubes, the first detector uses a 6A7 tube and the high frequency oscillator a 6C6. In the three I.F. stages 6D6 tubes are used. The second detector is a double diode and uses the 6B7. For the audio system the driver stage is a type 42 tube and two of these tubes are used in the final power audio stage working in a push-pull system operating in Class A-B. The beat frequency oscillator uses a 6C6, and the automatic volume control a 6B7. Two rectifier tubes are used: one, a type 5Z3, and the other a type IV. Newer high efficiency tubes, properly designed circuits, and scientifically engineered throughout, the new Hammarlund "Super-Pro" is an outstanding value in both shortwave and broadcast receiver design. Designed purposely for the short waves, this new receiver in addition is an outstanding development in a high fidelity, high quality receiver for ordinary broadcast use. Circular sent on request.

Hammarlund "Super-Pro"—Complete—With
Power Supply and Speaker

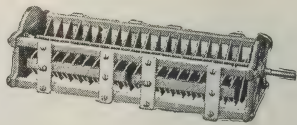
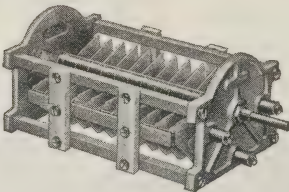
Hammarlund "Super-Pro" Receiver—Complete with Power Supply, All Tubes, and a special 12-inch High Fidelity Dynamic Speaker. Your Cost.....\$198.00

Hammarlund "Super-Pro" Receiver—Complete as in paragraph to the left, but including the Single Crystal Filter. Your Cost..\$216.00

NEW HAMMARLUND TRANSMITTING CONDENSERS

Cat. No.	Capacity mmf.	No. Plates	*Plate Spacing	Voltage Rating	Over-All Length	Your Cost
TC- 30-A	30	7	.192"	6500 V.	3 3/8"	\$ 3.00
TC- 50-A	50	11	.192"	6500 V.	4 5/16"	3.90
TC-100-A	100	21	.192"	6500 V.	6 5/8"	5.70
TC-150-A	150	31	.192"	6500 V.	8 15/16"	8.10
TC-225-A	225	47	.192"	6500 V.	12 21/32"	10.80
TC-100-B	100	11	.080"	3000 V.	3 3/16"	3.30
TC-150-B	150	17	.080"	3000 V.	3 7/8"	3.90
TC-225-B	225	23	.080"	3000 V.	4 5/8"	4.80
TC-335-BX	335	43	.100"	3500 V.	7 7/8"	7.20
TC-450-B	450	47	.080"	3000 V.	7 1/2"	7.20
TC-225-X	225	23	.080"	2000 V.	4 9/32"	3.60
TC-350-C	350	19	.038"	1000 V.	3 3/8"	3.00
TC-500-C	500	27	.038"	1000 V.	3 5/8"	3.30

*Actual Air-gap between adjacent rotor and stator plates.



NEW DUAL (Split Stator) TRANSMITTING TYPES

Cat. No.	Cap. Per Sec. Mmf.	Series Cap.	No. Plates	Plate Spacing	Over All Length	Peak Volts in Series	Your Cost
TCD-500-C	500	260	27	.038"	5 1/2"	2000 V.	\$ 5.40
TCD-100-X	100	50	11	.080"	4 1/4"	6000 V.	5.40
TCD-225-X	225	110	23	.080"	6 3/4"	6000 V.	6.60
TCD- 50-A	50	27	11	.192"	6 5/8"	13000 V.	7.20
TCD-100-A	100	51	21	.192"	11 1/4"	13000 V.	10.80

Lew Bonn Co. sells all Special Short Wave Amateur Receivers on a generous Time Payment Plan. Write for full details.

"NET PRICES"

For Better Radio Hammarlund PRECISION PRODUCTS

NEW!

HAMMARLUND LOW-LOSS COIL FORMS

Made of XP-53 dielectric natural amber color. Durable and extremely low-loss.

2½ inch winding space by 1½ inch dia.

SWF-4—(4 prong).....\$0.21

SWF-5—(5 prong)..... .21

SWF-6—(6 prong)..... .24

NEW! HAMMARLUND COIL SET

Set of 4 short-wave plug-in coils, wound on SWF coil forms. Tune from 17 to 270 meters. These factory-wound coil kits will get real DX results for you. Tune with Hammarlund 140 MMF. Condenser. You can't buy better coils!



SWK-4—(Kit of four, 4 prong, 2 winding, coils range 17 to 270 meters).....\$1.80

SWK-6—(Kit of four, 6 prong, 3 winding, coils range 17 to 270 meters).....\$2.25

BCC-4—(4 prong, 2 winding, coil for broadcast band, range 250 to 560 meters).....\$0.75

BCC-6—(6 prong, 3 winding, coil for broadcast band, range 250 to 560 meters).....\$0.90

INDIVIDUAL COILS

Many experimenters prefer to buy their wound coil forms separate instead of in a kit. Here is a listing of the Hammarlund Wound Coil Forms sold separately. 40 series are the 4 prong, 2 winding coils and 60 series are the 6 prong, 3 winding coils.

H41—17 to 41 meters\$0.60
H42—33 to 75 meters 60
H43—66 to 150 meters 45
H44—135 to 270 meters 45

H61—17 to 41 meters\$0.75
H62—33 to 75 meters 75
H63—66 to 150 meters 60
H64—135 to 270 meters 60

A popular choke among all Hams!

Inductance 2.1 M.H., D.C. resist. is 35 ohms, Dist. Cap. 1 MMF., 125 milliamperes.

Hammarlund CH-X.....\$0.45



HAMMARLUND CH 500 TRANSMITTING CHOKE Heavy Duty

Equally effective and efficient on all amateur bands. Inductance 2.5 M.H., Dist. Cap. less than 1.5 MMF., D.C. resist. 8 ohms, max. current 500 M.A.

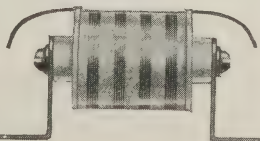
CH-500\$1.05



HAMMARLUND ISOLANTITE R. F. CHOKE

A very efficient, low-loss, general purpose, all-wave choke. Windings protected by lacquer and cellophane.

CH-8\$0.65



HAMMARLUND IMPROVED MIDGET CONDENSERS

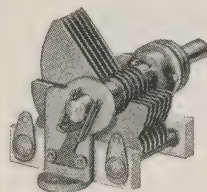
No.	Plates	Min. Cap. MMF.	Max. Cap. MMF.	Price
MC325M	43	12	320.....	\$2.10
MC250M	34	10	260.....	1.80
MC200M	27	10	200.....	1.65
MC140M	19	7	140.....	1.50
MC140S	19	7	140.....	1.50
MC100M	14	6	100.....	1.35
MC100S	14	6	100.....	1.35
MC 75M	11	6	80.....	1.20
MC 75S	11	6	80.....	1.20
MC 50S	7	5	50.....	.95
MC 35S	5	4	35.....	.90
MC 20S	3	3	20.....	.85

"M"—Midline plates.

"S"—Semi-circular plates.

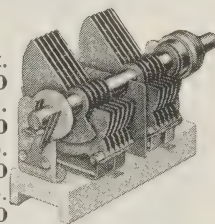
ISOLANTITE INSULATION

Very rigid construction. If you want real results when building a short-wave receiver, spend just a little more money and use Hammarlund condensers.



DUAL MIDGET CONDENSERS

MCD-140M—(140 MMF. max. cap. per section).....	\$2.40
MCD-140S—(140 MMF. max. cap. per section).....	\$2.40
MCD-100M—(100 MMF. max. cap. per section).....	\$2.10
MCD-100S—(100 MMF. max. cap. per section).....	\$2.10



DUAL-DOUBLE SPACED

MIDGET CONDENSERS

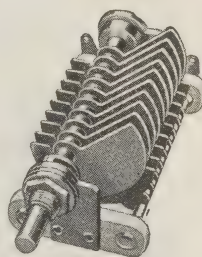
MCD-35MX—(33 MMF. max. cap. per section).....	\$2.10
MCD-35MX—(6 MMF. min. cap. per section).....	\$2.10
MCD-35SX—Same in semi-circular plates.....	\$2.10

F.B. for 5 meter rigs.

DOUBLE SPACED MIDGET CONDENSERS

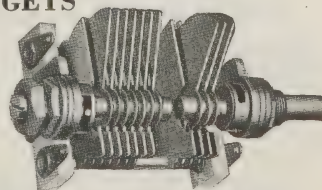
Just the thing for tuning amp. in C.C. XMTRS. and for neut. up to 210's and 50 watters. Also FB for 5 meter rigs.

MC-20SX—20 mmf. max. cap.—5 mmf. min. cap.....	\$1.20
MC-35MX—35 mmf. max. cap.—6 mmf. min. cap.....	\$1.35
MC35SX—35 mmf. max. cap.—6 mmf. min. cap.....	\$1.35
MC-50MX—50 mmf. max. cap.—7 mmf. min. cap.....	\$1.65
MC-50SX—50 mmf. max. cap.—7 mmf. min. cap.....	\$1.65



BAND SPREAD MIDGETS

These condensers are designed for use as band spread tuning condensers for S. W. Receivers and for use in amateur band frequency meters. The "tank" section can be set and locked at any desired capacity permitting the tuning section to spread narrow frequency ranges over entire dial, regardless of the range of the band or the coils used.



	Tank Cap.	Tuning Cap.	Price
MC120B.....	100 MMF.	20 MMF.	\$1.80
MC150B.....	100 MMF.	50 MMF.	1.95
MC175B.....	100 MMF.	75 MMF.	2.10

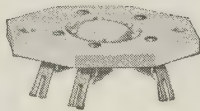
"NET PRICES"

101

For Better Radio Hammarlund PRECISION PRODUCTS

HAMMARLUND ISOLANTITE SOCKETS

S-4—4 prongs.
S-5—5 prongs.
S-6—6 prongs.
S-7—7 prongs.
S-7B—7 prongs for small base tubes.
Each\$0.36



HAMMARLUND FLEXIBLE COUPLING

Very strong, made of bakelized canvas for 1/4-in. shafts. Brass bushings. Each\$0.36



SHORT WAVE COIL FORMS

Made of Isolantite. Numerous holes cut make drilling unnecessary; size 1 1/2 x 2 1/2 ins.



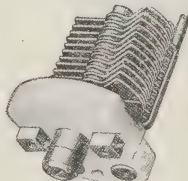
CF-4—4 prongs.
CF-5—5 prongs.
CF-6—6 prongs.
Each\$0.60

CF-5M—Size 1 3/8 x 2 ins. Made only in 4 prongs. Each ..\$0.45
CF-5M—Is ideally suited for ultra H.F. work.

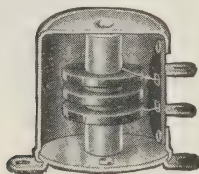


NEW HAMMARLUND AIR PADDING CONDENSER

APC25—25 MMF.\$0.78
APC50—50 MMF. 90
APC75—75 MMF. 1.00
APC100—100 MMF. 1.15



Size of 100 MMF., size 1-7/32 x 15/16 ins. Isolantite base, brass plates.



HAMMARLUND SHIELDED R. F. CHOKE

For use in high gain circuits. Inductance 10 M.H., D.C. resist. 65 ohms, current 100 M.A.

CH-10S\$0.60

HAMMARLUND HIGH IMPEDANCE R. F. CHOKE

For detector plate circuits, B plus and grid return leads, etc.

RFC-85—Inductance 85 M.H., D.C. resist. 215 ohms.....\$1.20
RFC-250—Inductance 250 M.H., D.C. resist. 420 ohms.....\$1.35



HAMMARLUND NEW TYPE "MEX"

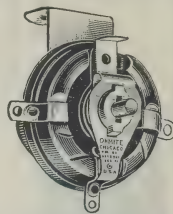
Midget equalizer condenser. Size 5/8 x 3/4 ins.; base range, 3-30 MMF. Dandy for trimming R.F. coils.\$0.18



Ohmite Amateur Units

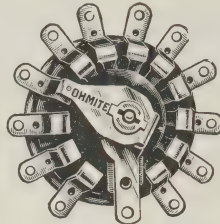
TRANSMITTING BAND-SWITCHES

The modern way. Can be used in all stages, making possible complete front-of-panel control. May be used in amplifier and output circuits up to 1 K. W. rating. Made of porcelain, vitreous enamel and metal. Brackets and knob furnished. Two or more switches may be ganged. Has 1/4-in. shaft.
No. T-503.....\$1.80



ALL-PORCELAIN HEAVY DUTY TAP SWITCHES

Has many uses including switching tapped transformer circuits, as a control of high voltage therapeutic equipment, to control radio transmitters, to change a transmitter over quickly from phone to key, etc. Vitreous enamel coated, contact shoe is special low resistance silver. Diameter of units up to eight are 2 1/4 in. Nine to twelve point units are 3 1/4 in.



NON-SHORTING TYPE

Stock Number	List Price
No. of Contacts	
T504-4	\$2.85
T506-6	3.15
T508-8	3.45
T10010-10	4.95
T10012-12	5.25

SHORTING TYPE

Stock Number	List Price
No. of Contacts	
T504S-4	\$2.55
T506S-6	2.85
T508S-8	3.15
T10010S-10	4.65
T10012S-12	4.95

HIGH FREQUENCY CHOKES



In construction of these units copper wire is wound over a porcelain core and the ends fastened to terminal lugs and tinned wire leads. The winding is protected against contact with other live parts and against corrosion.

No. OC-1—5/16 x 1 1/4-inch choke, resistance .85 ohms, 5.4 microhenries, 1,000 M.A. For use on 5 and 10 meter bands.
Price\$0.15
No. OC-2—9/16 x 2-inch choke, 35 microhenries, 1,000 M.A., resistance 2 ohms. For use on 10 and 20 meter bands.
Price\$0.45
No. OC-3—9/16 x 4-inch choke, 95 microhenries, 1,000 M.A., resistance 5 ohms. For use on 20 and 40 meter bands.
Price\$0.65
No. OC-4—1/4 x 5-inch choke, 220 microhenries, 1,000 M.A., resistance 9 ohms. For use on 20, 40, 80 or 160 meter bands.
Price\$0.90

POPULAR TYPE R. F. CHOKE

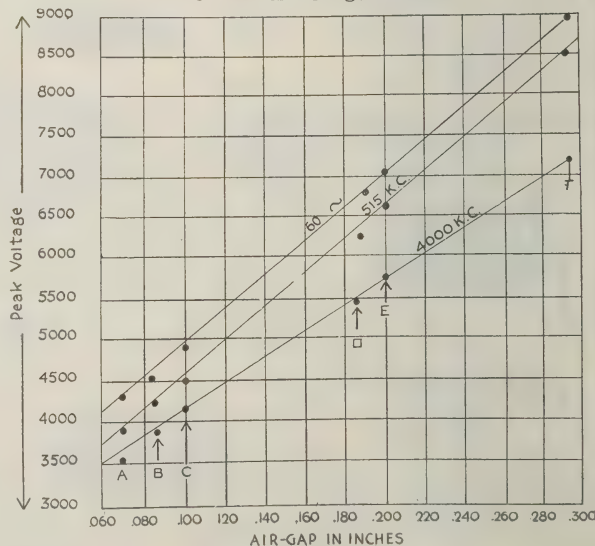


One of the most widely used amateur items. 2 1/2 M. H. resistance 60 ohms, rated at 125 M. A. Continuously universal winding in five sections. Has lug terminals. Fully guaranteed.
No. G-2129\$0.26

OHMITE HANDBOOK

For amateurs and servicemen. Valuable information.....\$0.10

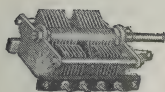
CARDWELL'S CHART On Condenser Voltage Limits.



CARDWELL CONDENSERS

MIDWAY

FEATHERWEIGHT



MIDWAY FEATHERWEIGHTS

Cardwell Midway Featherweights are REAL condensers—not midgits. Suitable for low-power transmitters using up to '10 type tube.

.031 in. air gap

Cat. No.	No. of Plates	Depth Behind Panel	Max. Cap. Mfd.	Min. Cap. Mfd.	Net Price
MR 25BS	3	2 ⁹ / ₁₆ in.	26	7	\$1.38
MR 50BS	5	2 ⁹ / ₁₆ in.	50	8	1.44
MR 70BS	7	2 ⁹ / ₁₆ in.	70	9	1.52
MR105BS	11	2 ⁹ / ₁₆ in.	105	11	1.60
MR150BS	15	2 ⁹ / ₁₆ in.	150	15	1.65
MR260BS	25	3 ⁹ / ₁₆ in.	260	25	1.80
MR365BS	35	3 ⁹ / ₁₆ in.	365	35	1.98

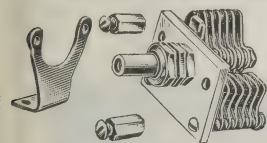
MIDWAY SEMI-HEAVY DUTY

Suitable for Transmitters Using Up To 75-Watt Tube

.070 in. air gap

Cat. No.	No. of Plates	Depth Behind Panel	Max. Cap. Mfd.	Min. Cap. Mfd.	Net Price
MT 20GS	5	2 ⁹ / ₁₆ in.	22	6	\$1.70
MT 35GS	7	2 ⁹ / ₁₆ in.	35	9	1.85
MT 50GS	11	2 ⁹ / ₁₆ in.	50	11	2.10
MT 70GS	15	3 ⁹ / ₁₆ in.	70	15	2.35
MT100GS	21	3 ⁹ / ₁₆ in.	100	21	2.65
MT150GS	31	4 ⁹ / ₁₆ in.	150	31	3.30
*MG 35GS	15	4 ¹ / ₂ in.	34	15	3.60

*For neutralizing 50-watt modulated stages—171 in. air gap—Mycalex insulation.



CARDWELL "TRIM-AIR" MIDGET CONDENSERS

Isolantite Insulation

Type No.	Max. Cap.	Min. Cap.	Air Gap In.	No. of Plates	Depth Behind Panel In.	Price
ZR 15AS	15	1.5	.031	5	15/16	\$0.75
ZR 25AS	25	2.0	.031	7	1-1/32	.83
ZR 35AS	35	2.5	.031	11	1-5/16	.89
ZR 50AS	50	2.8	.031	13	1-5/16	.96
ZR 75AS	75	2.7	.020	15	1-5/16	1.02
ZU100AS	100	2.9	.020	19	1-13/32	1.05
ZU140AS	140	4.5	.020	27	1 1/2	1.89

(ZU140AS is double ended, with two bearings.)
 *ZV5TS 5 1.8 .061 3 2 1/2 .75
 *Special for ultra H.F. Can be used straight or split stator.

TRANSMITTING TYPE

ZT 30AS	30	2.0	.070	17	2 1/2	1.10
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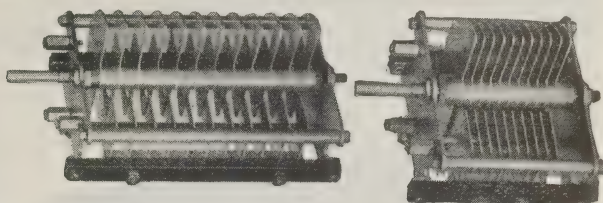
ACCESSORIES EXTRA

Mounting bracket with two screws and nuts.....	.06
Extra extension shaft (used for ganging), plus setting nut.....	.04
Mounting posts (one pair required per condenser, with screws and locking washers).....	.06

CARDWELL ROTOR LOCKING DEVICE

Designed for use where dial or knob tuning from the front of panel is not required.
 Each\$0.35

HEAVY DUTY TRANSMITTING TYPES



Type	Max. Cap.	Min. Cap.	No. of Plates	Air Gap	Depth Behind Panel	Price
XT-220-PS	220	23	21	.070	4 in.	\$2.40
XT-440-PS	440	42	43	.070	5 1/4 in.	4.20
XP-165-KS*	90	14	11	.084	3 in.	2.70
XP-290-KS*	165	20	19	.084	4 in.	3.90
XP-330-KS	290	32	33	.084	5 1/4 in.	5.70
XE-240-KS	330	41	37	.084	6 1/2 in.	6.00
XG-25-KS	240	32	33	.100	6 1/2 in.	6.00
XG-50-KS	25	10	5	.171	3 in.	1.80
XG-110-KS	50	17	11	.171	4 in.	3.60
XG-110-KS	110	31	23	.171	6 1/4 in.	5.40
XK-55-KS*	55	20	15	.230	5 3/4 in.	6.00
XC-18-KS*	18	6	5	.200	2 1/2 in.	3.30
XC-40-KS*	40	13	11	.200	4 in.	4.50
XC-65-KS*	65	18	17	.200	5 3/4 in.	5.70
XC-100-KS*	100	26	25	.200	7 3/8 in.	6.90
TJ-150-US*	150	28	15	.168	5-13/16 in.	13.80
TJ-315-US*	315	38	31	.168	9-9/32 in.	19.20
TC-150-US*	160	38	19	.200	7 1/4 in.	14.40
TC-200-US*	200	40	23	.200	8 1/4 in.	16.80
TC-300-US*	300	42	35	.200	11 1/4 in.	19.20
TL-50-US*	50	18	7	.294	4-13/16 in.	12.00
TL-80-US*	80	29	13	.294	6 7/8 in.	13.20
TL-160-US*	160	40	25	.294	11 in.	18.00
TL-200-US*	200	46	31	.294	15 1/8 in.	19.80

CARDWELL SPLIT STATOR TYPES

MIDWAY DOUBLE CONDENSERS

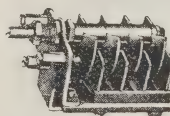
Type	Max. Each Sec.	Min. Each Sec.	No. of Plates Each Sec.	Air Gap	Depth Behind Panel	Price
MR-25-BD	25	7	3	.031	2-9/16 in.	\$2.37
MR-50-BD	50	8	5	.031	3-9/16 in.	2.52
MR-70-BD	70	9	7	.031	3-9/16 in.	2.64
MR-100-BD	100	10	11	.031	3-9/16 in.	2.76
MR-150-BD	150	11	15	.031	3-9/16 in.	2.88
MR-260-BD	260	13	25	.031	4 1/2 in.	3.00
MT-20-GD	20	6	5	.070	2-9/16 in.	3.00
MT-35-GD	35	9	7	.070	3-9/16 in.	3.30
MT-50-GD	50	11	11	.070	3-9/16 in.	3.50
MT-70-GD	70	13	15	.070	4 1/2 in.	3.90
MT-100-GD*	100	15	21	.070	6 1/4 in.	4.80
MO-180-BD*	180	18	29	.050	6 1/4 in.	4.80

HEAVY DUTY DOUBLE CONDENSERS

Type	Max. Each Sec.	Min. Each Sec.	No. of Plates Each Sec.	Air Gap	Depth Behind Panel	Price
XR-500-PD	500	19	21	.030	4 in.	\$3.60
XT-80-PD	80	14	9	.070	4 in.	3.00
XT-210-PD	210	18	21	.070	5 1/4 in.	4.80
XP-90-KD*	90	14	11	.084	6 in.	4.50
XP-165-KD*	165	20	19	.084	8 in.	6.60
XC-40-XD*	40	13	11	.200	7 3/8 in.	7.80
XC-75-XD*	75	20	19	.200	11 1/4 in.	10.20
XP-325-KD	325	41	37	.084	11 1/4 in.	13.20
XE-240-KD*	240	32	33	.100	11 1/4 in.	12.60
XG-50-KD	50	16	11	.171	6 1/4 in.	6.00
XG-110-KD	110	31	23	.171	11 1/4 in.	10.80
TJ-200-UD*	200	30	21	.168	12 in.	21.60
XC-40-XD*	40	13	11	.200	7 3/8 in.	7.80
XC-75-XD*	75	20	19	.200	11 1/4 in.	10.20
TC-160-UD*	160	38	19	.200	12 1/4 in.	20.40
TC-200-UD*	200	40	23	.200	14 1/4 in.	22.80
TC-250-UD*	250	40	29	.200	17 1/4 in.	25.20

*Mycalex Standard.

CARDWELL NEUTRALIZING CONDENSERS



Three specially designed condensers for neutralization purposes. The plate spacing is extra wide (.218) to permit high flash-over ratings. Mycalex is standard insulation on all types. NA-5NS is recommended for 852's. NA-14NS is recommended for RK18's or equivalent.

	Max. Cap.	Min. Cap.	Price
NA-4NS	4	2.5	\$2.15
NA-5NS	5	2.8	2.15
NA-14NS	8	5	3.00

Cardwell's Popularity Is Well Deserved!

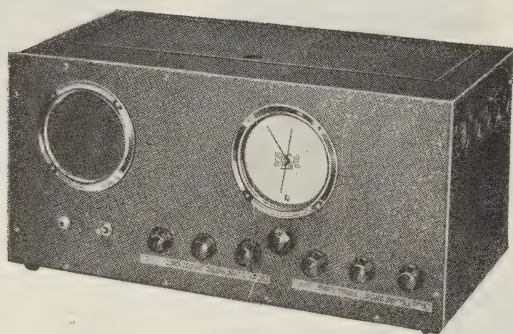
"NET PRICES"

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SHORT WAVE RADIO RECEIVERS

Lew Bonn Co. carries, in stock all the time, all of the receivers listed on these two pages as well as a full stock of National and Hammarlund receivers. When new models are brought out, Lew Bonn Co. is one of the very first to order them so that we can test them out and give you our opinion of their

merits. All of the receivers we list in this catalog have proven their ability to please amateurs with real FB performance. Remember, Lew Bonn Co. is willing to help you own a GOOD receiver through our time payment plan. If interested, write W9LIP for full details.

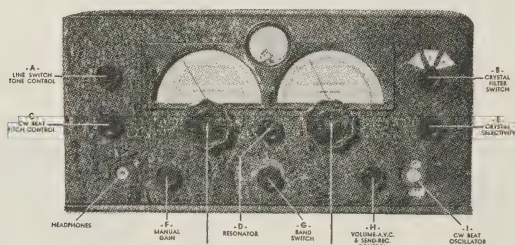


RCA COMMUNICATION RECEIVER ACR-136

We have sold a large number of these fine receivers and can honestly say that we have never sold anything that has pleased our customers as much as the ACR-136 has. We recommend it highly.

FEATURES

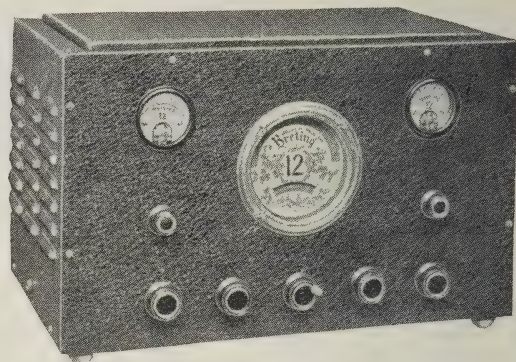
Seven tube superheterodyne in a heavy black crackle finish metal cabinet 22 in. long, 10½ in. high and 11½ in. deep. Tube layout: 6D6 R.F. amplifier, 6A7 oscillator and mixer, 6D6 I. F. amplifier (460 Kc.), 6B7 second det. and A.V.C., 6D6 B.F. osc., 41 A.F. output and 80 rectifier. Freq. range 540 to 18,000 Kc. continuous in three bands. Dial is calibrated in Kc. and Mc. Vernier pointer makes over nine complete revolutions while main pointer covers one band. Has band changing switch on front panel—no tapped coils. Power supply and 5 in. dynamic speaker built in. Has A.F. and R.F. gain controls, tone control and "Stand-by" switch. Comes absolutely complete.....\$69.50



NEW RME-69

The RME-69 is the 1936 successor to the famous RME-9D. This precision-built communication type receiver has proven to be one of the very best in performance. Now features continuous band-spread tuning on six bands from 9 to 550 meters. The amateur bands are grouped for a minimum amount of tuning. New, large, improved dials. Built-in monitor for both phone and C.W. Heavy black crackle finish metal cabinet is 19 in. long, 10½ in. deep and 9 in. high. Has calibrated micro-volt "R" meter. Uses the expensive electrical (condenser) system of band-spreading. Uses the 6.3 volt tubes as follows: 6D6 R.F. amplifier, 6D6 oscillator, 6C6 first det., two 6D6 I.F. amplifiers, 6B7 second det., A.V.C., and first audio, 6D6 B.F. osc., 42 A.F. output and 80 rectifier—nine tubes in all. Has single signal crystal filter (Biley 456 Kc.) as standard equipment. Has the following front panel controls: Line switch and tone control combined, beat freq. osc. adjustment, headphone jack, manual gain control, resonator control, band change switch, volume, A.V.C. and send-receive switch combined, beat osc. on-off switch, crystal selectivity control and crystal filter switch as well as the two main tuning controls.

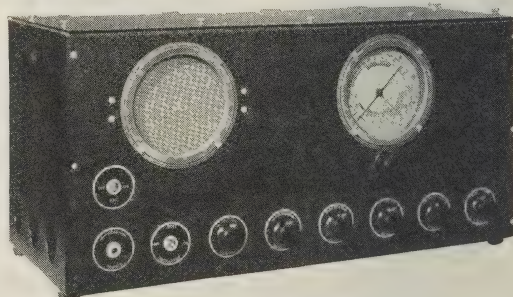
RME-69—Single signal super receiver complete in steel cabinet with crystal and tubes but no speaker.....\$123.80
Rola permanent magnet dynamic speaker, 8 in. diameter, in metal cabinet to match RME-69..... 11.10



THE NEW BRETING "12" DX RADIO

The new communication type receiver with the wonderful reputation. A twelve tube super incorporating everything that is new in the radio art. Complete and continuous band-spread tuning from 550 to 32,000 Kc. on five bands. Has following tube layout: one 6B7 first R.F., one 6D6 second R.F., one 6D6 oscillator, one 6C6 first det., two 6D6 I.F. amplifiers (432 Kc.), one 6B7 comb. second det., A.V.C. and first audio, one 42 second audio or driver, two 42 Class AB P.P. output, one 5Z3 rectifier and one 6D6 B.F. osc. Features 18 watts audio output which can be used as speech amplifier; receiver has a communication switch which disconnects the audio amplifier from the receiver and connects it to the tip jacks on the rear of the chassis. This provides you with an audio amplifier having 96 db. gain and 25 to 30 watts of power across the 200 ohm winding. The input tip jacks go directly to the grid of the 6B7 first audio. Mechanical band-spread is used, operating on a 11 to 1 ratio, providing more than enough spread in the amateur channels. Two meters are used—one an "R" meter, calibrated in "R" strength, and the other a volume indicator which is connected across the 200 ohm output winding and using the diode part of the first R.F. stage as rectifier. This meter is calibrated in units. Modulation percentage can be accurately read. Beat osc. is controlled from front panel. Heavy gauge metal cabinet, finished in black crackle, is 17½ in. wide, 11½ in. deep and 10½ in. high.

BRETING "12"—Complete with tubes and 12 in. dynamic speaker\$87.00
BRETING "12C"—As above but with crystal filter..... 93.00



HALLICRAFTER "SUPER-SEVEN"

An efficient communication type receiver that gives an extraordinary account of itself in performance. Covers 540 to 18,000 Kc. on three bands. Has iron core I.F.'s, A.V.C., 4 watts audio output, pre-selection on all bands, full continuous mechanical band-spread with airplane dial, tone control, dynamic speaker, front panel control of beat osc., send-receive switch, sensitivity control. Tubes used: 78 R.F., 6A7 first det. and mixer, 78 I.F., 75 second det., A.V.C. and first audio, 78 B.F. osc., 42 audio output and 80 rectifier. Black crackle finish cabinet 21¼ in. long, 9¾ in. deep and 10¼ in. high. Complete\$49.50

We have factory bulletins on all of these receivers, that give full details, schematic diagrams and larger photos. If interested, we will be pleased to send them to you.

"NET PRICES"

SHORT WAVE RADIO RECEIVERS

JONES—W9LIP “Super-Gainer”

1936

Metal Tube Model

IN KIT FORM

HERE IS THE AMATEUR RECEIVER

YOU'VE BEEN WAITING FOR!

IN KIT FORM Easy to Build

We furnish the complete kit including: Stamped and drilled chassis panel and shield partitions; all parts including wire and hardware; complete circuit diagram and instructions together with one set of coils (choice of 20, 40, 80 or 160 meter bands). This kit does not include power supply. As listed above.

No. JSG-K.....\$13.95
KIT OF RAYTHEON TUBES: 2—6C5, 1—6F6, 1—6J7.....\$3.02

KIT OF PARTS FOR POWER SUPPLY: Includes chassis, power transformer, choke, filter condensers, sockets, wire and hardware.

No. JSG-P.....\$5.95
CABINET AND SPEAKER: A special designed metal cabinet to house the Jones W9LIP Super-Gainer Receiver, the JSG-P power supply and a 5-inch dynamic speaker. Hinged lid. Black crackle finish.

No. JSG-C5.....\$4.65

EXTRA COILS

One set of coils furnished with kit. Extra sets of coils for either 10, 20, 40, 80 or 160 meter bands. Per set.....\$0.80
For broadcast band 2 sets of coils required; one set 200 to 360 meters, the other—360 to 550 meters. Per set.....\$1.25
(Each set of coils covers the frequencies up to the next set so full coverage of all frequencies is obtained when you have a complete set of coils. Band spread is very wide on all bands.)

Brand new—1936 features including metal tubes. We have taken the Jones Super-Gainer circuit designed by Frank Jones of “Radio” and engineered it to the new metal tubes. Now this circuit really gives loud speaker volume on real DX. We guarantee that this receiver will not “block” on even powerful locals, will tune as sharp as multi-tube superhets and also prove to be just as sensitive to weak signals. Noise level is very low. All in all, we’ve never run across anything that offers as much for your money as this Jones W9LIP 1936 metal tube Super-Gainer.

FEATURES: Regeneration at two frequencies—four tubes do work of seven—continuous band spread tuning from 10 to 200 meters—iron core I. F.—beat freq. oscillator—complete shielding—best quality parts. Extremely easy to build.

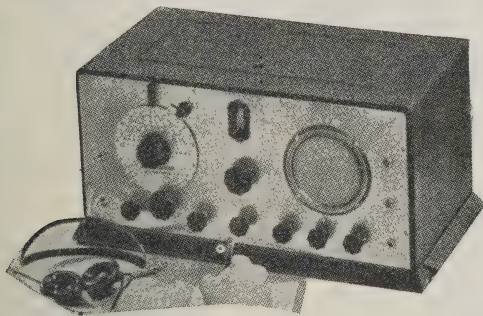
WRITE FOR CIRCULARS IF YOU DESIRE FURTHER INFORMATION

Complete and detailed information including diagrams sent upon request. Build this wonderful receiver as you get the money. You can start with the receiver kit and use a “B-Elim.” and filament transformer. Add the extra coils, power supply, cabinet, and speaker as you obtain more money. Also works very well as a battery operated receiver—low drain on both “A” and “B” batteries.

THE JONES W9LIP SUPER-GAINER 1936 METAL TUBE MODEL AMATEUR RECEIVER KIT

THE BEST “HAM” RECEIVER EVER
OFFERED AT ANYWHERE NEAR
THESE LOW PRICES!

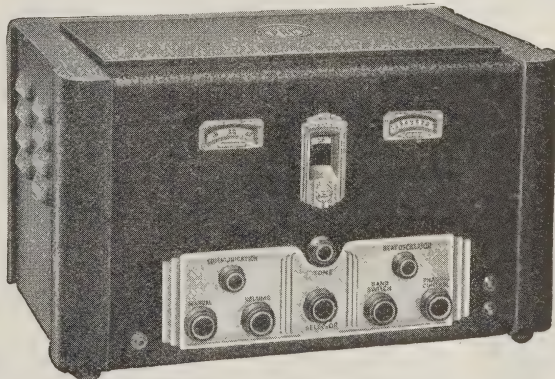
METAL TUBES—SUPER-SKYRIDER



The first communication type receiver using metal tubes. Usual hallicrafter. High quality. Covers 7.4 to 550 meters with full continuous electrical band spreading using the new sensational duo micro vernier dial. New high gain iron core I. F.'s used. Six tuned circuits. Full control of B. F. osc. from front panel. Has both R. F. and A. F. gain controls. Nine metal tubes are used as follows: 6K7-R. F. pre-selector; 6L7—first det. and mixer; 6C5—osc.; 6K7—first I. F.; 6H6—second det. and A. V. C.; 6K7—B. F. osc.; 6F5—first audio; 6F6—audio output and a 5Z4 rectifier. Furnished in a heavy black crackle finish metal cabinet with aluminum finished front panel. Size 19½ inches long, 10 inches deep and 10 inches high.

No. S-9—Complete.....\$79.50
No. SX-9—With crystal filter.....89.50

PATTERSON PR-16



Yes—We have them in stock! It's finally here and it was worth waiting for! The communication receiver that has EVERYTHING. Full 8 to 550 meter coverage with continuous extra wide band spread (electrical system). 18½ watts audio output with input of audio channel accessible on back panel of receiver. Dial is accurately calibrated, illuminated, and has two-speed tuning—15 to 1 and 200 to 1. Has inter-channel noise suppression controlled from front panel. I. F. assembly in one complete separate unit. “R” meter calibrated in “R’s.” Phone jack on front panel. Double shielding throughout. Litz-wound I. F.'s. (458 Kc.). Tube layout: 2—6D6's, two stages R. F.; 6C6—first det.; 6C6—osc.; 3—6D6's three stages of I. F.; 76—V. T. V. M.; 6F7—second det. and B. F. osc.; 6C6—A. V. C.; 6A6—first audio and P. P. phase inverter; 2—76's P. P. drivers; 2—6A3's P. P. audio output and 5Z3 rectifier. Cabinet is of heavy metal in an artistic design finished in black crackle. Size 19½ inches long, 13½ inches deep and 11½ inches high.

PR-16—Complete with tubes and 12-inch dynamic speaker.....\$95.70
PR-16C—Same as above but with crystal filter.....101.70

“NET PRICES”

105

BUILD YOUR OWN
ALL-STAR JR
ALL-WAVE Superheterodyne

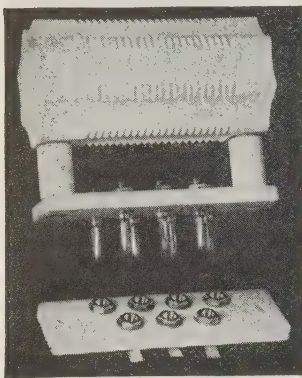
We carry a complete stock of All-Star Senior and All-Star Junior parts. If you are still adding to your coils, send us your orders at regular advertised net prices—

we have all of the coils as well as all other parts in stock all the time. Use parts numbers listed in official list.

TRANSMITTING COIL FORMS

FOR TRANSMITTERS GENERAL RADIO

TYPE 677 TRANSMITTER COIL FORM



This form is used in oscillators and power amplifiers in low and medium power transmitters. It is of impregnated moulded porcelain having low losses, and moulded with six heavy ribs on which the coil is wound. The form is 2½ inches outside diameter, 4½ inches long and has 21 V-cut threads occupying a winding space of 3 ins. Any size wire up to No. 10 B&S gauge may be used. Spacers and plug-jack bases are available so that the coils may be plugged in to the circuit. The bases are supplied with seven plugs and seven jacks, allowing any combination of standard circuit to be used. Grid and plate or

plate and antenna coils may be wound on one form for the higher frequency bands.

Transmitter Coil Form Assembly. Complete.....\$2.30

Type	Description	Price
677-U	Coil Form.....	\$0.50
677-PI	Coil Form Spacer (2 Required).....	.35 per pr.
678-P	Plug Base with 7 Type 274-P Plugs.....	.75
678-J	Jack Base with 7 Type 274-J Jacks.....	.70

NEW! LARGE SIZE G.R. XMTR. COIL FORM

No. 677Y—For 80 and 160 meters. Size: 4½x3½ inches. The 677U accessories fit 677Y also. Spaced and grooved for up to 31 turns of No. 10 wire. Each\$0.80

BUD "GIANT" PLUG-IN COIL FORM

Special low-loss tan colored bakelite. Size, body of coil form, is 2-7/16 inches in diameter and 3¾ inches long. Winding space, 3½ inches. Eight ribs extend ¼ inch out from body. Has moulded grip ridge.

No. B734—4-prong	\$0.36
No. B735—5-prong	.39
No. B736—6-prong	.42

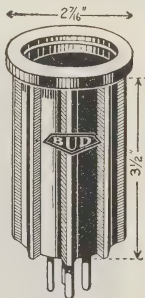
Also furnished with ribs grooved 12 turns per inch, for space winding.

No. B1221—4-prong	\$0.50
No. B1222—5-prong	.54
No. B1223—6-prong	.57



ICA INSULEX TRANSMITTING PLUG-IN COIL FORM

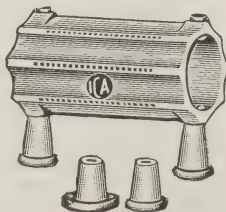
Size 2¼x4 inches high. Low dielectric and absorption losses. Ideal for H.F. work. Heavy ribs stand well out from body. No. 2660—7-prong, large.....\$0.75



ICA INSULEX TRANSMITTING COIL FORMS

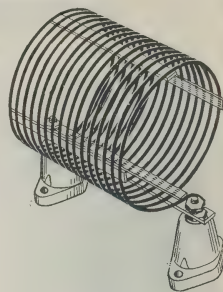
Threaded and drilled. Size 3½ inches O.D. by 5 inches long and is drilled for 26 turns, any size wire up to No. 10 may be used. Grid and plate or plate and antenna coils may be wound on this form for the H.F. bands.

No. 2650—For 20 and 40 meters.....	\$0.90
No. 2651—Complete with legs and hardware.....	1.05
No. 2652—6½ inches long, 4 inches O.D., for 80-160 meters.....	1.20
No. 2653—With legs and hardware.....	1.35



WESTERN "AIR-WOUND" COILS

Extremely light and durable—low dielectric losses—less eddy current losses. Wound of enameled copper wire vulcanized on low-loss nitro-cellulose strips. Very attractive in appearance, these coils will undoubtedly prove to be extremely popular among all amateurs.

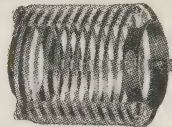


Wave Length	Dia. in	Mounting Inches	No Turns	Wire Size	Net Price	Wire Size	Net Price
160A	5	3.5	14	12	\$1.40	10	\$1.60
160B	4	5	34	14	1.60		
160T	5	7.5	38	12	2.35	10	3.10
80A	4.5	3.5	10	12	1.30	10	1.40
80B	3	5	30	14	1.40		
80T	4.5	7.5	28	12	2.00	10	2.40
40A	3.5	3.5	6	12	1.15	10	1.25
40B	3	5	17	14	1.30		
40T	3.5	7.5	18	12	1.70	10	1.85
20A	3.5	3.5	4	12	1.15	10	1.25
20B	3	5	8	14	1.25		
20T	3.5	7.5	10	12	1.60	10	1.75

CODE: A—Antenna; B—Buffer; T—Tank. Center tapped with 6-inch flexible lead and plug, add 60c; jack for same, 20c; with coupling link and 6-inch flexible pair, add 90c; jack for same, 20c.

R.E.L. PLUG-IN COILS

One-piece molded low-loss bakelite, grooved. No. 242—Coil Form.....\$0.84
No. 183—Coil Bases......84
You can get 42 turns of No. 14 solid on this R.E.L. Form.



R.E.L. XMTG INDUCTANCE

Type S—3 inches diameter, 6 inches long, 11½ turns—for 20 and 40 meters.....\$3.25
Type L—5 inches diameter, 6 inches long, 11½ turns—for 40, 80 and 160 meters \$3.25

ICA WOUND TRANSMITTING INDUCTANCES

These inductances are designed for use in amplifiers and transmitters, equipped with taps for neutralizing and antenna coupling coils. Precision winding with double silk covered wire. Forms are 2¼ in. diam., are 3½ in. long, and are the 5-prong type. Designed for use with tuning condenser of 100 Mmfd. Wire size is No. 16 on 20, 40, 80 meter coils and No. 18 on 160 meter coils.

20 METER INDUCTANCE

Has 6½ turns spaced ¼ and tapped at 1½ turns. Antenna coil 6 turns close wound. No. I2680.....\$1.20

40 METER INDUCTANCE

Has 12½ turns spaced ¾, tapped at 4½ turns. Antenna coil 6 turns close wound. No. I2681.....\$1.20

80 METER INDUCTANCE

Has 20½ turns close wound, tapped at 6½ turns. Antenna coil 10 turns close wound. No. I2682.....\$1.20

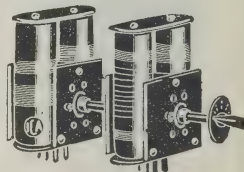
160 METER INDUCTANCE

Has 42½ turns close wound, tapped at 14½ turns. Antenna coil 15 turns close wound. No. I2683.....\$1.20

ICA BAND SWITCHING SHORT WAVE AND BROADCAST COILS

For TRF and Superhets

Covers all bands from 16 to 550 meters. No plugging-in required. Dead-ends eliminated. Shields between coils. Whole unit plugs into 4-prong socket. Can be ganged easily. Comes complete with knob, dial plate and diagrams. No. 1415—For regenerative detector, single unit.....\$2.55
(Use an additional No. 1415 unit if single stage of T.R.F. is desired.)



BAND SWITCHING SUPERHET OSC. COILS— ALL-WAVE

No. 1416—Covers 16 to 550 meters, 465 Kc. Complete with diagrams.....\$2.55

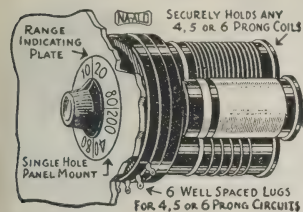
COMPLETE BAND SWITCHING SUPERHET ALL-WAVE COILS

No. 1417—Composed of one No. 1415 unit and one No. 1416 unit ganged together. Factory adjusted. Complete with knob, dial plate and diagrams.....\$4.50

"NET PRICES"

COIL SETS — COIL FORMS — ACCESSORIES

NO. 700 COIL SELECTOR UNIT

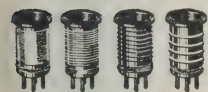


The new No. 700 instantly swings any coil into circuit by turning knob. All 4, 5, 6-prong coils are rigidly held by the special sockets. Knob and indicator plate on face of panel show what coil is in circuit. Self-cleaning contacts. Can be used in tandem.

No. 700—Selector without coils\$2.10
No. 700CPL—Hardware for

ganging No. 700s in tandem\$0.15

ICA WOUND COIL SETS



Regular standard 2-circuit 4-prong coils. Primary and secondary on each coil. 15 to 200 meters with usual 140 or 150 mmf. S. W. condenser, 4-prong base, 4 coils to set.

No. 1421B—S. W. Coil Set.....\$0.99

Broadcast coils same as above but tune 100 to 550 meters with above size condenser, 2 coils to set.

No. 1430B—B. C. Coil Set.....\$0.90

No. 1440B—Ultra S. W. Coil. Same as above, covers 9.5 to 21 meters.....\$0.40

Regular standard 2-circuit 5-prong coils. Primary and secondary on each coil same as 1421B but 5-prong base interchangeable with band-spread coils. 5-prong base, 4 coils to set.

No. 1437—S. W. Coil Set.....\$1.50

BAND-SPREAD WOUND COILS, FIVE-PRONG

Band-spread coils with low-loss ceramic padding condenser mounted on each coil. Spreads all ham bands for convenient tuning with usual 140 or 150 mmf. condenser. 5-prong base. No. 1433—20-40-80-160. For amateur bands. Set of 4 coils \$2.10

Any single coil, any band.....\$0.54

BAND-SPREAD S. W. BROADCAST COILS, FIVE PRONGS

No. 1434—19-25-31 and 49 meter bands. Set of 4 coils.....\$2.10

Any single coil, any band.....\$0.54



Regular standard 3-circuit 6-prong coils. Primary and secondary and tickler on each coil. Tune 15 to 200 meters. Use 140 or 150 mmf. tuning condenser. Standard 6-prong forms, 4 coils to set.

No. 1423B—S. W. Coil Set.....\$1.50

Broadcast coils same as above but tune 100 to 550 meters. 6 prongs, 2 coils per set.

No. 1424B—B. C. Coil Set.....\$1.10

No. 1442B—Ultra S. W. coil covering 9.5 to 21 meters.....\$0.45

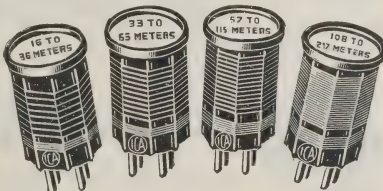
ICA SMALL RIBBED BAKELITE COIL SET

Tune 16 to 200 meters using 140, 150 mmf. condenser, 4 prongs, 4 coils in set, labelled.

No. 1471—S. W. Coil Set.....\$1.14

No. 1472—Ultra S. W. Coil. 9.5 to 21 meters.....\$0.45

No. 1473—Broadcast Coils. Set of 2. Tune 190 to 550 meters.....\$1.00



ICA 6-PRONG COIL SET

On large ribbed bakelite coil forms. 3 circuit—primary, secondary and tickler. Tune with 140, 150 mmf. condenser. 16 to 200 meters. Set of four coils.

No. 1428—S. W. Coil Set.....\$1.95

No. 1441—Ultra H.F. Coil. 9.5 to 21 meters.. \$0.60

No. 1429—Broadcast Coils. Set of 2. 190 to 550 meters.....\$1.35

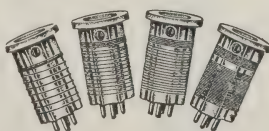
ICA INSULEX COIL SET

6-prong, 3 circuit—primary, secondary and tickler. Tune with 140, 150 mmf. condenser. Range 16 to 200 meters. This is a very high quality set of 4 coils.

No. 965—S.W. Coil Set.....\$3.00

No. 948—Ultra H.F. 9.5 to 21 Meter Coil.... \$0.90

No. 966—Broadcast Coils. Set of 2.....\$1.80



SMALL BAKELITE COIL FORMS

Genuine bakelite coil forms with color code ring—red, yellow, blue, green. Winding space, 1 1/4 x 2 1/4 inches.

No. 1108B—4-prong\$0.12

No. 1113B—5-prong\$0.12

No. 1114B—6-prong\$0.12

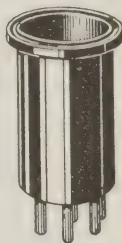
No. 707—7-prong, large.....\$0.18

NEW BAND-SPREADING COIL FORMS

Complete with quality ceramic padding condenser mounted on coil form top.

No. 1463—Form with 80 mmf. condenser..\$0.27

No. 1464—Form with 180 mmf. condenser.. \$0.27



ICA BAKELITE RIBBED LOW-LOSS COIL FORMS

Designed for easy grooving. Heavy thick ribs. Good for low power transmitters, oscillator and buffer coils. Size 3 5/8 x 1 9/16 inches. Colors: black, and brown.

No. 1051—4-prong\$0.18

No. 1052—5-prong\$0.18

No. 1053—6-prong\$0.21

No. 1054—7-prong, large.....\$0.24

ICA SMALL RIBBED BAKELITE COIL FORM

Size 1 3/8 x 2 1/4 inches. Have rim on top. Recess in top for wave band labels and padding condensers.

No. 2158—4-prong\$0.12

No. 2159—5-prong\$0.15

No. 2160—6-prong\$0.15



ICA INSULEX COIL FORMS

Insulex is a non-hygroscopic ceramic compound, having very good low-loss qualities. Beautiful in appearance, these coils are slotted to eliminate necessity of drilling. Size 3 5/8 x 1 9/16 inches.

No. 952—4 prong.....\$0.30

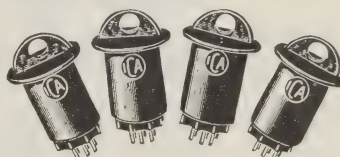
No. 953—5 prong.....\$0.33

No. 954—6 prong.....\$0.36

No. 955—7 prong, large.....\$0.39

SHIELDED "HANDLE TYPE" S. W. COILS

For plug-in from front of panel. Completely shielded and windings protected. Coils are ribbed bakelite, 1 1/4 x 3 1/4 inches. Low-loss construction. Each coil plainly marked.



FOUR-PRONG, TWO-WINDING SET

No. 970—Set of 4 coils, covers 16 to 271 meters. Tunes with 140 or 150 mmf. condenser.....\$3.00

No. 973—Broadcast coils (190 to 550 meters), for above set\$1.80

SIX-PRONG, THREE-WINDING SET

Same construction as No. 970 set but have primary, secondary and tickler windings.

No. 971—Set of 4 coils, 16 to 271 meters.....\$3.30

No. 975—Broadcast coils (set of 2).....\$2.10

HANDLE TYPE COIL FORMS, UNASSEMBLED

Type 1055—As described above—no windings; 4, 5, 6 or 7 large. Each.....\$0.45



FRONT PANEL COIL SHIELD AND SOCKET

Designed to take the Types 970-971 wound coils or 1055 coil form. Has flange for mounting. Supplied with 4, 5, 6 or 7 large socket.

Type 978\$0.36

LONG WAVE COIL SET

450 to 2,000 meters. To go with 1421B and 1430B. Tune with same 140 or 150 mmf. condenser, 4-prong base.

No. 1484—Set of 4 coils.....\$2.25



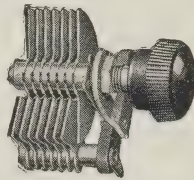
"NET PRICES"

Midget Condensers — Dials — Neons

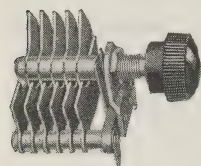
HAMMARLUND "STAR" MIDGETS

Single hole mounting. $\frac{1}{4}$ in. shaft. Low-loss bakelite insulation.

SM15—3 plates, 15 mmf. . . . \$0.50
SM25—5 plates, 25 mmf. 50
SM50—7 plates, 50 mmf. 55
SM100—13 plates, 100 mmf. . .60
SM140—17 plates, 140 mmf. .75



NEW STAR DOUBLE SPACED MIDGET



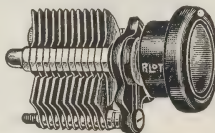
Just the thing for neutralizing 210's or 50-watt amplifiers.
SM35X—Maximum, 35 mmf.; minimum, 6 mmf. \$0.60

See Hammarlund Isolantite Midgets on Page 101

"PILOT TYPE" MIDGET CONDENSERS

J 5—.000015 mfd. 5 plate \$0.50
J 7—.000025 mfd. 7 plate 50
J13—.00005 mfd. 13 plate 55
J23—.0001 mfd. 23 plate 60
J14—.00015 mfd. 23 plate 66

Made by Federal Co. of Brooklyn, N. Y.



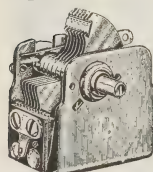
Same low prices.

PRECISION CONDENSERS

Just the right condensers for that S. W. you're building.
No. 533—150 mmf. \$0.75

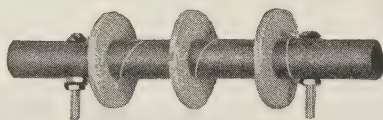
Two Gang

No. 538—150 mmf. Per section 1.35



INSULATED FLEXIBLE COUPLER

Very Good Quality
Fits $\frac{1}{4}$ in. shaft.
No. 1 2101—\$0.19



UTILITY CHOKES

For the XMTG Ham.

Type B—200 mils., 1.75 M. H., dist. cap. less than $1\frac{1}{2}$ mmf. Very low DC resistance. \$0.75

Type A—1000 mils., 1.95 M. H., dist. cap. less than $1\frac{1}{2}$ mmf. Very low DC resistance. \$0.90

GLOW LAMPS

Genuine G. E.

Every amateur needs one. Used for indicating R. F. feed backs and peaks in feeders. Three sizes.



Each
No. GE 25— $\frac{1}{4}$ watt. . . \$0.40
No. GE 50— $\frac{1}{2}$ watt. . . .40
No. GE100—1 watt. . . .40
No. GE200—2 watt. . . .50



E. F. JOHNSON INDICATOR

Molded bakelite handle, $\frac{1}{4}$ in. shaft fitting 4 in. diameter scale.

No. 204. \$1.35

No. 206

Same as No. 204 except scale is 6 in. diameter.

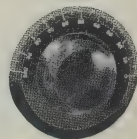
No. 206. \$1.80



KURZ KASCH BAKELITE

DIAL

No. 567—4 in. An old favorite with all hams. Center knob screws off—set screw is covered. No. R. F. burns.
100 to 0. \$0.25
No. 529—Same in 3 in. 20



BAKELITE VERNIER DIAL

$3\frac{3}{4}$ in. high by 3 in. wide. Easy to install. No gears to strip. Scale 0 to 100 and 100 to 0.
No. 2204—Black \$0.45
No. 2205—Brown 49

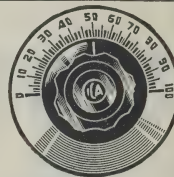


CHROME SILVER DIALS

Satin finish with black etched markings. Large bakelite flange knob, easy to grip.

BRASS-BLACK SATIN FINISH DIALS

Satin black finish with etched silver markings. Bar knob.



Silver

No.	Dia. of Dial In.	Calib.	Price
2284	2	180°	0-100 \$0.54
2285	2	325°	0-100 .54
2290	3 1/4	180°	0-100 .78
2291	3 1/4	325°	0-100 .78
2292	4	180°	0-100 .96
2293	4	325°	0-100 .96

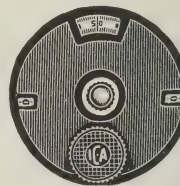
Black

No.	Dia. of Dial In.	Calib.	Price
2220	2	180°	0-100 \$0.27
2219	2	325°	100-0 .27
2218	2	325°	0-100 .27
2216	3 1/4	180°	0-100 .36
2215	3 1/4	180°	100-0 .36
2214	3 1/4	325°	0-100 .36

DIAL MARKER



With self-tapping screws. Silver finish.
No. 2191—For 325° dials.
No. 2192—For 180° dials.
Each \$0.15



BAKELITE VERNIER DIAL

With three windows. 4 in. diameter. 180°, 0 to 100. Ratio is 9 to 1. No back-lash. A quality dial.
No. 2211. \$1.05

CHROME SILVER DIAL

Four-inch silver dial with large, easy grip bakelite knob. Black etched markings. Comes complete with marker. Gives slow motion-vernier effect in tuning.
No. 2198—325°, 0 to 100. \$0.95
No. 2199—180°, 0 to 100. 95



FINGER GRIP BAKELITE KNOBS

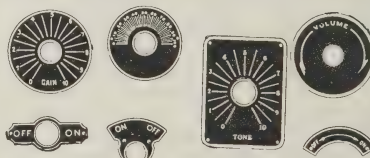
Large flange type is illustrated. Very fine for transmitters and amplifiers.

With Metal Pointer

No. 1166— $1\frac{1}{2}$ in. \$0.24
No. 1168—1 in. 30
No. 1170—2 in. 36
No. 1172—With flange 3 in. 39

No Pointer

No. 1165— $1\frac{1}{2}$ in. \$0.18
No. 1167—1 in. 24
No. 1169—2 in. 30
No. 1171—With flange, 2 in. 30



DIAL PLATES AND NAME PLATES

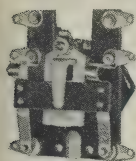
Black with Silver Markings

No. C264—2 1/4 in. diam., 325°, 0 to 10—"Gain" \$0.24
No. C263—1 1/2 in. diam., 325°, 0 to 100—"Plain" 21
No. C262—1 1/4 in. diam., 180°, 0 to 100—"Plain" 21
No. C277—2 1/4 x 1 1/4 in., 325°, 0 to 10—"Tone" 15
No. C276—2 1/4 x 1 1/4 in., 325°, 0 to 10—"Gain" 15
No. C25—1 1/4 in. diam.—"Volume" 10
No. C275—1 1/2 x 3/4 in., 3/4 in. oval—"Off-On" 07
No. C278—1 3/4 x 3/4 in., Rect—"Off-On" 07
No. C273—1 x 1 1/4 in., with hole—"Off-On" 07
No. 2237—7/16 in. mounting hole 1 in. diam.—"Microphone" 12
No. 2238—7/16 in. mounting hole 1 in. diam.—"Phono" 12
No. C29—7/16 in. mounting hole 1 1/4 in. diam.—"Beat Osc." 10
No. C28—7/16 in. mounting hole 1 1/4 in. diam.—"Det. Cond." 10
No. C27—7/16 in. mounting hole 1 1/4 in. diam.—"Osc. Cond." 10

neon

Relays - Insulators - Name Plates

STRUTHERS DUNN "DUNCO" RELAYS



This concern is a "specialist" in the manufacture of relays of all types and is one of the largest exclusive producers of relays in the world. All Dunco relays are thoroughly guaranteed.

ALL-PURPOSE RADIO RELAY

Compact size. Has two isolated contacts suitable for operation in high or low voltage circuits, all frequencies as well as 60 cycle or D.C. power circuits. Each contact can be operated separately. Very fine for "keying." Contacts will handle 1,000 volts D.C. at 300 M.A., 250 volts D.C. at 500 M.A., 110 volts A.C. at 6 amps. and 12 volts at 6 amps.

- No. RA1—2½ volts 60 cycle coil (power consumption of coil less than a type 27 tube).....\$2.00
No. RD1—5 to 6 volts D.C. coil (power consumption of coil less than a type 37 tube).....2.00
No. RA3—6.3 volts 60 cycle coil (power consumption of coil less than a type 76 tube).....2.00

DUNCO MIDGET KEYING RELAY

Suitable for speeds up to 50 w. p. m. Large silver contacts. Coil consumes 50 M.A. at 110 volts 60 cycles while contacts will interrupt currents of 6 amps. at 110 volts A.C. Contacts are single pole and close when coil is energized. Size 2½x1½x1¼ inches.



No. ASBX1.....\$3.85

OTHER DUNCO MIDGET RELAYS

- No. ABTX1—S.P.D.T. Double break.....\$3.85
No. AD BX1—D.P.S.T. Single break.....4.95
No. CSBX1—S.P.S.B. Double throw.....4.70

DUNCO TIME DELAY RELAY

Comes with a snap-on housing that covers relay completely. This unit is suitable for use with transformers up to 500 watts condenser input or 1,000 watts choke input. Delays plate voltage for 30 seconds after 866 filaments are lit. Size 3x2½x2¼ inches.

No. TD-96\$8.80

DUNCO VACUUM TUBE RELAY

No. CXB51—Ultra sensitive, designed for D.C. in coil circuit or A.C. in contact circuit. Coil is 10,000 ohms and will carry 18 M.A. Adjustable. Contacts are rated 2 amps. at 110 volts A.C. Size 2½x2¼x2 inches.....\$5.50

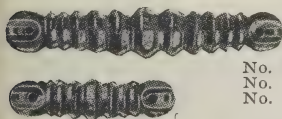
WARD LEONARD UNDERLOAD RELAY

Underload relay. For protection to Class B modulator tubes and transformers when Class C stage drops load due to loss of excitation. Adjustable.

- No. 507-514—Max. 300 M.A.....\$6.00
No. 507-515—Max. 600 M.A.....6.00

PYREX INSULATORS

Known the world over as the best form of "low-loss" insulators. They cost more because they really are much better than other insulators.



PYREX ANTENNA INSULATORS

- No. 67007—3½ in. long.....\$0.17
No. 67017—7½ in. long......70
No. 67021—12½ in. long.....2.10

PYREX

STAND-OFF INSULATORS OVAL BASE

- No. 67106—3 in. high.....\$1.55
No. 67107—7 in. high.....1.75
Size of base 3½x1½ inches.

PYREX AMATEUR ENTERING LEAD-IN INSULATORS

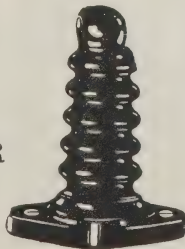
- No. 67104—15 in. long.....\$1.55
No. 67105—20 in. long.....1.60
2½ in. diameter



BEEHIVE STAND-OFF

Brown or White
Body 1½ in. high,
base 2 in. diameter.

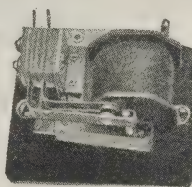
No. 1673A—
Each\$0.09
Ten for \$0.85



FLERON LEAD-IN INSULATOR
4 in. high, dark brown glazed porcelain. Very strong. Hole-in-top type.

No. 14—Each\$0.15

GUARDIAN RELAYS



This is a new line of radio relays especially designed for amateur radio transmitters. They have proven to be very dependable in operation.

100% guaranteed.

MODEL K100

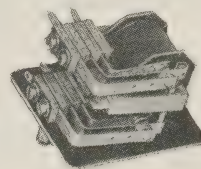
KEYING RELAY

A compact unit, operates from any filament winding from 5 to 16 volts A.C. or from any convenient D.C. source. Relay contacts. Keying contacts are pure silver and will handle up to 5,000 volts at highest possible rate of sending. The speed of this relay together with its strong magnet coil and return spring assure a clean make and break that makes copying easy. This relay may also be used for any circuit control where a single pole, single throw switch is needed.....\$3.30

GUARDIAN BREAK-IN RELAY

Essentially a double pole, double throw switch that is actuated by a control switch in 110 volts A.C. line supplying power to the coil. Is a necessity in remote control operation.

No. B-100.....\$4.50



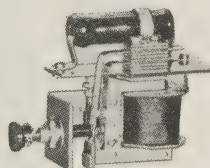
GUARDIAN OVERLOAD RELAYS

The best means of protection for tubes, transformers, condensers and meters. Can be mounted on front panel—push a button and circuit is closed. Three types.

Model L-250—Will break at 250 M.A.\$4.50

Model L-500—Will break at 500 M.A. 4.50

Model X-100—Universal. Can be adjusted to break at any current from 150 to 500 M.A.....7.20



CUTLER-HAMMER RELAYS

No. CH381-O—S.P.S.T. Operates on 110 volts A.C. Fine for keying. Open type.....\$3.30

No. CH381-E—Same as above except completely cased.....3.95



ANTENNA

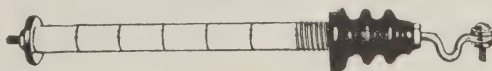
CLASS A MODULATOR

BAKELITE AND METAL NAME PLATES

For Transmitters and Amplifiers

Bradley bakelite name plates are engine engraved on 1/16 in. thick by ¾ in. wide, drilled, beveled and polished bakelite. Type NPB-5—As listed below. Each.....\$0.15
Bud name plates are made of high grade aluminum with raised polished letters on black satin finish.
Type B1130 Series—As listed below. Each.....\$0.06

Oscillator	Beat Osc.	Transmitter	Modulator
Plate Volts	Receive	Amplifier	Plate
Microphone	Send-Receive	Plate Voltage	Modulator
Input	Plate	Off-On	Grid
Monitor	Power Amp.	Class "B"	Microphone
D.C. Volts	Neutralizer	Modulator	Current
Send	Fader	Grid Current	200 Ohm
Selector	Antenna	Ground	Input
Buffer	Key	Crystal Osc.	200 Ohm
Crystal Osc.	A.C. Input	Plate	Output
CW-Phone	Transceiver	Buffer Plate	500 Ohm
200 Ohm	A.C. Volts	Buffer Grid	Input
500 Ohm	Speech Amp.	Power Amp.	500 Ohm
Tone Control	Gain Control	Plate	Output
F.H. Volts	Tritet Osc.	Power Amp.	Radio
Rectifier	Grid	Screen Cur-	Record
Output	Modulator	rent	
Freq. Meter	Doubler		



FLERON LEAD-IN BUSHING

14 inches long—go through 10-inch wall. No. 9.....\$0.66

"NET PRICES"

109

JOHNSON INSULATORS

"MICROMITE" 10 for \$0.42
 $\frac{1}{8}$ " high (body $\frac{1}{2}$ ") 6-32
 hdwe. Brown or white.
 No. 24—Each.....\$0.05



"TINY MITE" 10 for \$0.47
 $1\frac{3}{8}$ " high (body 1") 8-32
 hdwe. Brown or white.
 No. 22—Each.....\$0.05



"STANDARD" 10 for \$0.72
 2" high (body $1\frac{9}{16}$ ")
 10-32 hdwe. Brown or
 white.
 No. 20—Each.....\$0.08



"STANDARD" WITH JACK
 Size same as regular
 No. 20. Brown or
 white.
 No. 20J—Each..\$0.09



"JUNIOR GIANT"
 $3\frac{3}{8}$ " high (body $2\frac{3}{4}$ ").
 Base is $1\frac{7}{8}$ " square.
 $\frac{1}{4}$ "-20 hdwe. is used.
 Brown or white.
 No. 62—Each...\$0.18



"GIANT"
 $5\frac{1}{4}$ " high (body
 $4\frac{1}{2}$ "). Base $2\frac{1}{4}$ "
 square. $\frac{1}{4}$ "-20
 hdwe. used. Brown
 or white.
 No. 60—Each \$0.39



NEW Metal Base STAND-OFFS

Eliminate breakage through
 use of steel base.

BEE-HIVE TYPE
 New space-saving oval base.
 $1\frac{1}{2}$ " ins. high—uses 10-32 hard-
 ware.

No. 65.....\$0.15
 No. 65J—Same as No. 65 ex-
 cept has No. 74 Jack.....\$0.18



Medium size stand-off. $2\frac{3}{4}$ "
 ins. high—uses $\frac{1}{4}$ "-20 hard-
 ware.
 No. 66.....\$0.24
 No. 66J—With No. 76
 Jack\$0.39
 Large size stand-off. $4\frac{1}{2}$ " ins.
 high—uses $\frac{1}{4}$ "-20 hardware.
 No. 67.....\$0.36
 No. 67J—With No. 76
 Jack\$0.51



No. 75 No. 74 No. 76 No. 77 No. 77A
 Johnson "banana-spring" Plugs and Jacks
 are accurately constructed parts with a
 multitude of uses in radio, transmitting,
 receiving and equipment. "General Pur-
 pose" and "Jumbo" models will fit cor-
 responding parts of other manufacture.
 Bright nickel plated.
 No. 74 Jack. "General Purpose." Height,
 $\frac{5}{8}$ " ins. Thread, $\frac{1}{4}$ "-28.....\$0.04
 No. 75 Plug. Fits No. 74 Jack. Height,
 $1\frac{1}{8}$ " ins. Thread, 6-32.....\$0.04
 No. 76 Jack. "Jumbo" size. Height,
 $1\frac{1}{4}$ " ins. Thread, $\frac{1}{4}$ "-24.....\$0.18
 No. 77 Plug. Fits No. 76 Jack. Height,
 $1\frac{1}{4}$ " ins. Thread, $\frac{1}{4}$ "-28.....\$0.15
 No. 77A Plug. Same as No. 77, but with
 10-32 machine screw for mounting on
 ceramic coil forms and similar applica-
 tions.....\$0.18

No. 44 thru-panel stand-off.
 Body $\frac{5}{8}$ " above and $\frac{5}{16}$ " be-
 low panel. 6-32 hdwe.
 Mounts in $\frac{5}{16}$ " hole.
 No. 44—Each.....\$0.09
 2 for \$0.17



No. 42 thru-panel stand-
 off. Body $\frac{5}{8}$ " above and
 $\frac{3}{8}$ " below panel. 10-32
 hdwe. Mounts in $\frac{1}{16}$ "
 hole.
 No. 42—Each.....\$0.12



No. 40 thru-panel stand-
 off. Body $1\frac{1}{4}$ " above and
 $\frac{1}{2}$ " below panel. 10-32
 hdwe. Mounts in $\frac{1}{2}$ "
 hole.
 No. 40—Each ...\$0.15



No. 42J jack type thru-
 panel stand-off. Same as
 No. 42 except with stand-
 ard jack.
 No. 42J—Each....\$0.15

No. 40J jack type thru-
 panel stand-off. Same as
 No. 40 except with stand-
 ard jack fitting. G. R.
 Banana style plug.
 No. 40J—Each....\$0.18



BEE-HIVE TYPE

Preferred by many.

Body $1\frac{1}{2}$ " ins. above and $1\frac{1}{16}$ "
 ins. below panel. 10-32 hard-
 ware—mounts in $9/16$ " in. hole.
 No. 45.....\$0.18
 No. 45J—Same as above with No.
 74 Jack.....\$0.21



Medium large through-panel
 stand-off. Body $2\frac{3}{4}$ " ins. above
 and 1 in. below panel. $\frac{1}{4}$ "-20
 hardware—mounts in $\frac{3}{4}$ "-in.
 hole.
 No. 46.....\$0.33
 No. 46J—Same as No. 46 ex-
 cept has No. 76 Jack.....\$0.48
 Large through-panel stand-off.
 Body $4\frac{1}{2}$ " ins. above and $1\frac{1}{4}$ "
 ins. below panel. $\frac{1}{4}$ "-20 hard-
 ware—and mounts in $1\frac{1}{16}$ "-in.
 hole.
 No. 47.....\$0.48
 No. 47J—Same as No. 47 ex-
 cept has No. 76 Jack.....\$0.63

"Spring-Sleeve" Type



No. 70 No. 71 No. 72 No. 73

Johnson "Spring-Sleeve" Plugs and Jacks
 provide the lowest possible contact re-
 sistance, high current-carrying capacity
 and mechanical strength. Accurately
 machined of heavy solid brass. Tension
 is maintained by a unique phosphor
 bronze "spring-sleeve" which forces the
 current-carrying surfaces into intimate
 contact. Bright nickel plated.
 No. 70 Jack. Large, heavy-duty type.
 Height, $1\frac{1}{2}$ " ins. Mounting screw, $\frac{1}{4}$ "-
 20.....\$0.21
 No. 71 Plug. Fits No. 70 Jack. Diam-
 eter, $\frac{3}{8}$ " ins. Thread, $\frac{1}{4}$ "-28. Hole in end
 for soldered lead.....\$0.07
 No. 72 Jack. Medium duty type. Height,
 $1\frac{1}{8}$ " ins. Mounting screw, 10-32.....\$0.12
 No. 73 Plug. Fits No. 72 Jack. Diam-
 eter, $\frac{1}{4}$ "-in. Thread, 10-32. Hole for
 soldered lead. Fits inside $\frac{1}{4}$ "-in. copper
 tubing.....\$0.04

JOHNSON ANTENNA EQUIPMENT

Made of highly vitrified, glazed,
 Low Absorption porcelain suitable
 for R.F. and high voltage, low
 frequency insulation. All white
 glazed finish.

TRANSPPOSITION BLOCKS

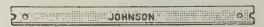
Size $1\frac{5}{8}$ " x $2\frac{1}{2}$ "



For Doublet Anten-
 nas. Considered to be
 highest quality on
 the market.

No. 31 Transposition
 blocks. Each\$0.08
 10 for\$0.70

FEEDER SPREADERS



6" long with grooves in ends for
 lead wires and holes for tie wires.
 Very good quality.

No. 134—4". Each.....\$0.09
 No. 136—6". Each.....\$0.12

AIRPLANE STRAIN INSULATORS

Excellent for guy wire support.
 Least weight and less wind resis-
 tance. Very sturdy.

No. 32 Strain Insulator. Each..\$0.05
 10 for \$0.40



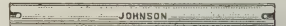
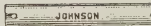
"CRUCIFORM"

Strain Insulator. New—
 for Ultra H. F. work.
 Weighs less than 1 oz.
 No. 38.....\$0.09

ANTENNA INSULATORS

All 1" diameter.
 Will stand 1,500
 pound pull without
 breaking.

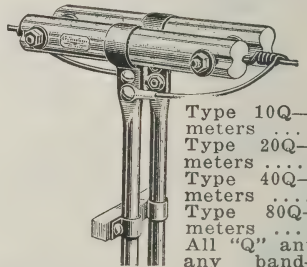
No. 107—Ant. Insulator. 7" long.
 Each\$0.42



No. 112—Ant. Insulator. 12"
 long. Each\$0.54
 No. 120—Ant. Insulator. 20"
 long. Each\$0.90
 (Not illustrated)

JOHNSON TYPE "Q"

Transmitting Antenna Systems



Type 10Q—for 10
 meters\$3.75
 Type 20Q—for 20
 meters\$5.90
 Type 40Q—for 40
 meters\$10.50
 Type 80Q—for 80
 meters\$19.65
 All "Q" antennas—
 any band—come

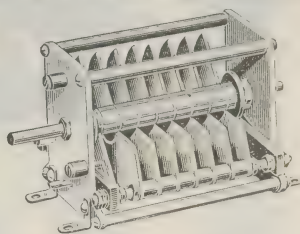
complete except for end insulators
 and wire for transmission line. Com-
 plete instructions included.

Write for special Johnson Techni-
 cal Bulletin on the "Q" Antenna
 Systems. If you want the best, the
 Johnson "Q" is it.

JOHNSON QUALITY PRODUCTS

New! E. F. JOHNSON CO. Announces New! MYCALEX INSULATED TRANSMITTING VARIABLE CONDENSERS

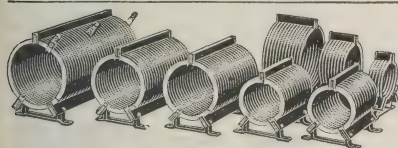
Johnson worked on condenser designs for several years and in this new line has brought out features that are sure to please the amateur. **Mycalex Insulation standard equipment.** Sturdy plates .051 inch thick—polished, rounded edges. Standard ¼ inch shafts extend front and rear to permit ganging, rear-drive, etc. Specifications on bearings, etc., are the best ever put into a condenser. Johnson Type "D" Condensers ARE superior in design and workmanship.



JOHNSON TYPE "D" TRANSMITTING CONDENSERS

Catalog Number		Plate Spacing	R. M. S. (2) Volts Per Section	Capacity (2) M. M. F. Per Section		No. of Plates Per Section	L (3) Inches	Price
				Max.	Min.			
500D35	Single Section	.080	3,500	46	20	3	2 1/8	\$ 3.90
100D35	Single Section	.080	3,500	100	23	7	2 1/8	4.35
150D35	Single Section	.080	3,500	145	27	11	2 1/8	4.80
250D35	Single Section	.080	3,500	250	34	19	4 1/8	5.70
350D35	Single Section	.080	3,500	350	40	27	5 1/2	6.60
500D35	Single Section	.080	3,500	500	53	39	6 5/8	7.95
50D70	Single Section	.175	7,000	50	25	6	2 1/8	4.50
100D70	Single Section	.175	7,000	100	31	13	4 1/8	5.70
150D70	Single Section	.175	7,000	150	40	21	6 5/8	6.90
250D70	Single Section	.175	7,000	250	55	36	9 1/2	9.30
350D70	Single Section	.175	7,000	350	70	51	12 7/8	11.85
50D90	Single Section	.250	9,000	50	27	8	4	5.40
100D90	Single Section	.250	9,000	100	39	18	6 3/4	6.60
150D90	Single Section	.250	9,000	150	50	27	9 1/2	7.80
250D90	Single Section	.250	9,000	250	76	47	15 7/8	10.20
100DD35	Dual-Section	.080	3,500	100	23	7	4 5/8	6.60
150DD35	Dual-Section	.080	3,500	150	27	11	5 1/2	7.50
200DD35	Dual-Section	.080	3,500	200	32	15	6 5/8	8.40
300DD35	Dual-Section	.080	3,500	300	42	19	9 1/2	10.20
70DD70	Dual-Section	.175	7,000	70	27	9	6 5/8	7.50
100DD70	Dual-Section	.175	7,000	100	30	13	8 3/8	8.85
150DD70	Dual-Section	.175	7,000	150	38	21	12	10.95
200DD70	Dual-Section	.175	7,000	200	45	29	15 5/8	13.20
50DD90	Dual-Section	.250	9,000	50	27	8	8 5/8	7.95
100DD90	Dual-Section	.250	9,000	100	39	18	14	10.35

- (1) This simple numbering system completely describes any condenser. The first two or three figures indicate the capacity in micro-microfarads; a single "D" indicates a single section, and "DD" indicates a dual-section condenser; the final two figures, by adding two zeros, give the voltage rating.
- (2) The voltage rating of a dual-section condenser, sections in series, is approximately TWICE that of a single section—the capacity ONE-HALF that of a single section. With sections in parallel, the voltage rating is that of a single section, and the capacity is approximately double.
- (3) "L" gives length measured outside of end plates. For over-all length add 1½ inches for front and ¾ inch for rear shaft extension.



E. F. JOHNSON HI-Q TRANSMITTING INDUCTORS For Amateur Transmitters

TANK CIRCUIT COMBINATIONS

Amateur Band	Tuning Capacity (M.M.F.)		Johnson "Hi-Q" Inductor No.
	Single Section	Dual Section*	
160 m. (1.715 mc.)	100	200	No. 620
	200	200	No. 622
80 m. (3.5 mc.)	50	100	No. 622
	100	200	No. 626
	200	200	No. 624
	200	200	No. 626
40 m. (7.0 mc.)	25	50	No. 624
	50	100	No. 626
	120	240	No. 628
	50	120	No. 626
20 m. (14 mc.)	15	30	No. 626
	30	60	No. 628
		30	No. 628

*Capacity per Section.

High electrical efficiency is secured by carefully proportioned dimensions, generous conductor size, and the elimination of all insulating material from the inside of the coil. Special edgewise-wound copper strip conductor makes a compact, rigid inductor. Inductance can be accurately adjusted by clip placement. Taps for coupling or bandswitching can be tried and changed quickly. No. LC4—Inductor Clip. Clips are not included with "Hi-Q" inductors and must be ordered separately. These are made of nickel-plated phosphor-bronze and have very low contact resistance.

Price.....\$0.12

No. 2202HL3—Impedance-Matching Inductor. For balanced networks (two required for complete network). Inductance 14 mch. Complete with three clips. Price.....\$3.55

No. 2403HL3—Impedance-Matching Inductor. For unbalanced networks (one required). Inductance, 33 mch.....\$5.00

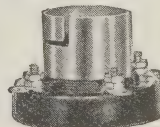
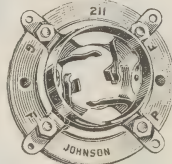
JOHNSON "HI-Q" TRANSMITTING INDUCTOR SPECIFICATIONS

Catalog Number	620	622	624	626	628	619	623	627
Net Price.....	\$5.45	\$4.15	\$3.60	\$2.95	\$2.55	\$2.55	\$2.95	\$2.15
Inductance, Microhenries.....	88	44	21	10	4.4	2.0	0.8	0.26
Amateur Band, Meters.....	160	160-80	80-40	40-20	20-10	15	10	6
Number of Turns.....	46	33	23	18	12	15	10	6
Inside Diameter.....	4"	3 1/4"	3 1/4"	2 1/2"	2 1/2"	4"	3 1/4"	2 1/2"
Height, overall.....	5 7/8"	5 1/8"	5 1/8"	4 1/2"	4 1/2"	5 7/8"	5 1/8"	4 1/2"
Width, overall.....	4 1/2"	3 3/4"	3 3/4"	3 3/4"	3 3/4"	4 1/2"	3 3/4"	3 3/4"
Length, overall.....	9"	6 1/2"	6"	5"	3 1/4"	3 1/8"	2 1/4"	1 1/2"

"NET PRICES"

JOHNSON SOCKETS For Transmitters

No. 211 is for use with 50 and 75 watt tubes. Very sturdily built, strong positive contacts. No. 211—50 Watt Socket. Each \$1.05



No. 210 is for use with type 10, 800, RK20, 825, 866, etc. A heavy duty junior model of No. 211. No. 210—UX Socket. Each.....\$0.75

250 WATT SOCKET



Glazed porcelain, plate terminal has safety cup. No. 215.....\$2.10

803—RK28 SOCKET

Same construction as No. 211 but has five contacts. No. 216.....\$1.50



de Forest

AMATEUR RADIO TUBES

EXCLUSIVE RCA-DE FOREST TUBE DISTRIBUTORS IN
THE NORTHWEST

We are very proud of our appointment as the exclusive distributor of this leading line of transmitting tubes in the Northwest, and we strive hard to merit the appointment by carrying a large stock, offering technical advice and by assisting our customers in every way possible. We stand back of the generous RCA-De Forest guarantee 100% at all times. Our slogan, "When you think of tubes—order from Lew Bonn Co." applies to the transmitting types also.

AMATEUR TRANSMITTING TYPES

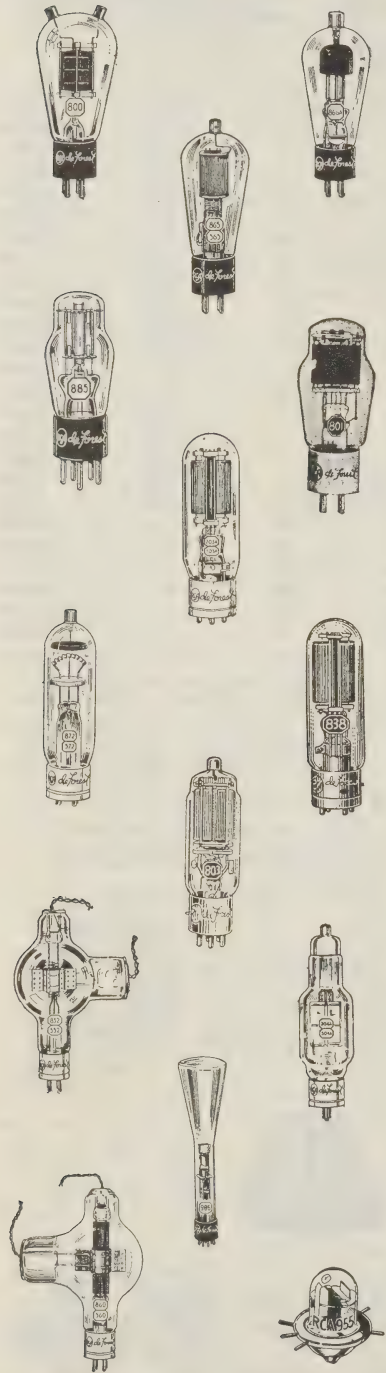
Type	Amateur's Net Price	DESCRIPTION	Elec-trodes	Max. Plate Dissipation Watts	Cathode Type	Cath-ode Volts
203-A	\$17.50	R-F Power Amplifier, Oscillator, Class B Modulator	3	100	Filament	10.0
204-A	97.50	Oscillator, R-F Power Amplifier, Class B Modulator	3	250	Filament	11.0
211	17.50	R-F Power Amplifier, Oscillator, A-F Power Amplifier, Modulator	3	100	Filament	10.0
800	10.00	R-F Power Amplifier, Oscillator, Class B Modulator	3	35	Filament	7.5
801	4.50	R-F and A-F Power Amplifier, Oscillator, Modulator	3	20	Filament	7.5
802	3.90	R-F Power Amplifier Pentode	5	10	Heater	6.3
803	38.50	R-F Power Amplifier Pentode	5	125	Filament	10.0
831	265.00	Oscillator, R-F Power Amplifier	3	400	Filament	11.0
838	18.00	Class B Modulator, R-F Power Amplifier, Oscillator	3	100	Filament	10.0
840	6.00	R-F Pentode	5	—	Filament	2.0
841	3.25	R-F Power Amplifier, Oscillator, A-F Voltage Amplifier	3	15	Filament	7.5
842	3.25	A-F Power Amplifier, Modulator	3	15	Filament	7.5
843	12.50	Power Amplifier, Oscillator	3	15	Heater	2.5
844	18.00	Screen Grid R-F Power Amplifier	4	15	Heater	2.5
845	20.00	Modulator, A-F Power Amplifier	3	75	Filament	10.0
849	160.00	Modulator, A-F and R-F Power Amplifier, Oscillator	3	400	Filament	11.0
850	37.50	Screen Grid R-F Power Amplifier	4	100	Filament	10.0
851	350.00	Modulator, A-F and R-F Power Amplifier, Oscillator	3	750	Filament	11.0
852	16.40	Oscillator, R-F Power Amplifier	3	100	Filament	10.0
860	35.00	Screen Grid R-F Power Amplifier	4	100	Filament	10.0
861	295.00	Screen Grid R-F Power Amplifier	4	400	Filament	11.0
864	1.60	Amplifier (Low Microphonic Design)	3	—	Filament	1.1
865	12.75	Screen Grid R-F Power Amplifier	4	15	Filament	7.5
868	6.00	Phototube	2	—	—	—
917	6.00	Phototube (High Vacuum Type)	2	—	—	—
918	6.00	Phototube (High Sensitivity)	2	—	—	—
954	5.80	Detector, Amplifier Pentode (Acorn Type)	5	—	Heater	6.3
955	3.75	Amplifier, Detector, Oscillator (Acorn Type)	3	—	Heater	6.3

Type	Amateur's Net Price	RECTIFIERS DESCRIPTION	Elec-trodes	Max. Peak Inverse Volts	Cathode Type	Cath-ode Volts
217-A	\$20.00	Half-Wave High-Vacuum	2	3,500	Filament	10.0
217-C	20.00	Half-Wave, High-Vacuum	2	7,500	Filament	10.0
866	2.25	Half-Wave, Mercury-Vapor	2	7,500	Filament	2.5
866-A	5.00	Half-Wave, Mercury-Vapor	2	10,000	Filament	2.5
872	16.50	Half-Wave, Mercury-Vapor	2	7,500	Filament	5.0
872-A	18.50	Half-Wave, Mercury-Vapor	2	10,000	Filament	5.0
878	11.00	Half-Wave, High-Vacuum for Cathode-Ray Tubes	2	20,000	Filament	2.5
879	3.00	Half-Wave, High-Vacuum for Cathode-Ray Tubes	2	7,500	Filament	2.5
885	2.00	Gas-Triode for Cathode-Ray Sweep-Circuit Control	3	300	Heater	2.5

Type	Amateur's Net Price	CATHODE-RAY TUBES DESCRIPTION	Elec-trodes	Max. Anode No. 2 Volts	Cathode Type	Cath-ode Volts
903	\$97.50	9-inch Electromagnetic Deflection, High-Vacuum	5	7,000	Heater	2.5
904	52.50	5 in., Electrostatic-Magnetic Deflection, High-Vacuum	5	4,600	Heater	2.5
905	45.00	5 in., Electrostatic Deflection, High-Vacuum	4	2,000	Heater	2.5
906	18.00	3 in., Electrostatic Deflection, High-Vacuum	4	1,200	Heater	2.5
907	48.75	5 in., Electrostatic Deflection, High-Vacuum, Short Persistence Screen	4	2,000	Heater	2.5
908	21.00	3 in., Electrostatic Deflection, High-Vacuum, Short Persistence Screen	4	1,200	Heater	2.5

Effective October 22, 1935—Prices subject to change without notice.

NOTICE NEW LOW PRICES! R. C. A. 866 \$ 2.25
R. C. A. 852 16.40
"NET PRICES"



Complete Stock



de Forest

All the Time

THE LEADER IN NEW DESIGNS

RAYTHEON

Thoroughly Guaranteed

AMATEUR TRANSMITTING TUBES

Type No.	Fil. Volts	Nom. Watts Output	DESCRIPTION	NET
RK10	7.5	10	R. F. Oscillator and Amplifier, Class A or B Modulator	\$ 3.50
RK15	2.5	10	R. F. Amplifier Doubler, Zero Bias Class B Modulator	4.50
RK16	2.5	1.5	R. F. Amplifier, Class A Driver	4.50
RK17	2.5	10	R. F. Oscillator, Amplifier and Doubler Pentode	4.50
RK18	7.5	40	Class B Modulator, R. F. Oscillator and Amplifier	10.00
RK19	7.5		Full Wave, Vacuum Heater Type Rectifier	7.50
RK20	7.5	50	R. F. Osc., Amp., Doubler, Suppressor Modulation Pentode	15.00
RK21	2.5		Half Wave, Vacuum Heater Type Rectifier	5.00
RK22	2.5		Full Wave, Vacuum Heater Type Rectifier	7.50
RK23	2.5	15	Shielded Pentode R. F. Osc., Amp., Doubler	4.50
RK24	2.0	1.5	Triode Modulator, R. F. Oscillator, Amplifier	2.25
RK25	6.3	15	Pentode R. F. Oscillator, Amplifier and Doubler	4.50
RK28	10.0	100	High Output Pentode, any R. F. Service	38.50
RK29	10.0	100	Pentode Osc., Mod., R. F. Power Amp., Class B and C	38.50
RK30	7.5	65	High Frequency R. F. Oscillator and Amplifier	10.00
RK31	7.5	125	Zero Bias Class B Modulator	10.00
RK32	7.5	50	High Frequency Triode	12.00
RK34	6.3	20	Twin Triodes, High Freq. R. F. Osc., Amp.	3.50
RK100	6.3	15	Gaseous Discharge Amplifier	7.00
203A	10.0	100	R. F. Oscillator, Amplifier, Class B Mod.	17.50
841	7.5	13	Audio Amp., R. F. Osc., Amp., Doubler	3.25
842	7.5	7	Class "A" Amplifier Modulator	3.25
864	1.1	1	Non-Microphonic Triode Amplifier	1.60
866A	2.5		Half-Wave Mercury Vapor Rectifier	5.00
872A	5.0		Heavy Duty Half-Wave Mercury Vapor Rectifier	18.50

RAYTHEON AMATEUR TRANSMITTING TUBES

are ruggedly built to give excellent service and long life at full rated output. A type for every amateur need is offered in the list above. We recommend, unreservedly, the use of the **RK20** as a buffer or doubler tubes in medium and high power transmitters. Our experience has proven that the **RK20** is ideally suited for this purpose. The use of the **RK31's** as Class B Modulators is also recommended. They are zero bias tubes giving 125 watts of audio in Class B and are just the ticket for modulating a single 03A. The **RK34** is also showing up well as a crystal oscillator tube. You can't beat Raytheon tubes for outstanding performance.

TAYLOR TUBES

"More Watts Per Dollar"

Absolutely Guaranteed

866

Heavy Duty

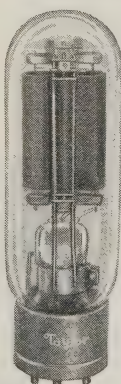
Half Wave Mercury Vapor Rectifier.

Each **\$1.65**

Filament now of multi-strand construction. Inverse peak 7,500 volts. Fil. volts 2.5 5 amps.

825

55 Watt Class C


203A

Regular Type

Carbon plate. 100 watt plate dissipation. Standard characteristics.

\$12.50

203B

For the Phone Men
A pair in class B will give 200 watts audio. Fil. 10 volts 3 amps. Max. plate volts 1,000. Max. plate current 500 M.A. **\$7.50**

HD-203A

Heavy Duty

Plate lead from top. Carbon plate. Fil. volts 10 4 amps. Max. plate dissipation 150 watts. Max. plate input to pair in P.P. is 900 watts. **\$17.50**

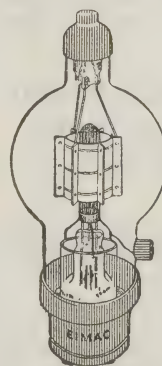
F52—Plate lead from top—grid lead from side. Fil. volts 10, 4 amps. Plate volts 3,000. Max. plate dissipation 150 watts. Carbon plate. **\$22.50**

Type 211—Carbon plate.....**\$12.50**
Type 845—Carbon plate.....**12.50**
Type 211C—Diathermy work...**12.50**
Type 866B— $\frac{1}{2}$ wave rectifier...**3.00**
Type 872— $\frac{1}{2}$ wave rectifier...**12.00**

"NET PRICES"

EIMAC TRANSMITTING TUBES

Tantalum Elements



Newcomers in the radio tube field and already one of the leaders. Feature the lowest inter-electrode capacities of any tubes.

The EIMAC "50T"

A medium mu three element tube. High output at audio and radio frequencies up to 75 MC. No "Getter" inside envelope to give off gas when heated. Unusually low plate resistance coupled with mu of 12 makes tube easy to drive to high power output and plate efficiency. Fil. volts 5, fil. cur. 6 amps. Rated plate dissipation 50 watts; amp. factor 12, normal max. plate cur. 100 M.A. Base UX 4 pin. Max. plate volts, 3,000 V...**\$13.50**

EIMAC "150T"

A medium mu, three element vacuum tube for high efficiency and output, as oscillator or amplifier at audio and radio frequencies up to 75 MC. May be used at reduced output, up to 300 megacycles. No "Getter" inside envelope to give off gas when heated. Exclusive design insures high vacuum during tube life. Fil. volts 5, fil. cur. 10 amps. Rated plate dissipation 150 watts, amp. factor 13. Normal max. plate cur. 200 M.A. Base; stand 50 watt. Plate volts 3,000. Normal power output (Class C 75% eff.) 450 watts**\$24.50**

EIMAC "500T"

500 watts plate dissipation.....**\$175.00**

Transmitting Condensers... Fixed



Cornell-Dubilier—the safe, dependable condenser line since 1910. At these NEW LOW PRICES you can't afford to take chances on "bargains." Use C-D Condensers and be safe!

See the full line of Cornell-Dubilier Receiving Condensers on pages 12, 13, 14, 15. All types of electrolytic and paper condensers.



OIL FILLED TRANSMITTING TYPE FILTER CONDENSERS

Heavy Metal Case

Notice

Compact Sizes

Fully

Guaranteed

Type	Cap.	Size	Your Cost
Working Voltage, 600 DC			
TD6010	1	2 1/2 x 1-13/16 x 1-1/16	\$1.05
TD6020	2	2 1/2 x 1-13/16 x 1-1/16	1.65
TD6040	4	4 x 1-13/16 x 1-1/16	2.70
Working Voltage, 1,000 DC			
TD10010	1	2 1/2 x 1-13/16 x 1-1/16	1.50
TD10020	2	4 x 1-13/16 x 1-1/16	2.70
TD10040	4	4 x 2 1/2 x 1 1/2	4.20
Working Voltage, 1,500 DC			
TD15010	1	2 1/2 x 1-13/16 x 1-1/16	2.25
TD15020	2	4 x 1-13/16 x 1-1/16	3.75
TD15040	4	4 x 2 1/2 x 1 1/2	5.40
Working Voltage, 2,000 DC			
TD20010	1	4 x 1-13/16 x 1-1/16	3.15
TD20020	2	4 x 2 1/2 x 1 1/2	4.80
TA20040	4	4-13/16 x 3 3/4 x 2 1/2	6.60
Working Voltage, 2,500 DC			
TA25010	1	4 x 3 x 3 3/4	8.40
TA25020	2	4 x 3 x 3 3/4	10.20
TC25030	3	4 x 5 x 5 3/4	12.60
Working Voltage, 3,000 DC			
TC30010	1	3 3/8 x 5 3/8 x 3 3/8	10.80
TC30020	2	6 x 5 3/8 x 3 3/8	13.80
TC30040	4	9 1/4 x 5 3/8 x 3 3/8	10.80



OIL IMPREGNATED SPRAGUE SHORT WAVE H. F.

By-Pass Condensers. FB for by-pass, blocking and antenna coupling. Metal cased—non-inductive.

Cat. No.	Capac. Mfd.	Work'g Voltage	Dimensions Dia. L'th	Your Price
SW-22	.002	1500	9/16 x 1-9/16	\$0.27
SW-25	.005	1500	5/8 x 1-11/16	.27
SW-11	.01	1500	11/16 x 1-11/16	.42
SW-15	.05	1000	7/8 x 2 1/4	.48
SW-1	0.1	1000	7/8 x 2 1/4	.54



SANGANCO

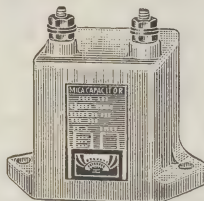
Mica Condensers Are Accurate! Stay Accurate! Known for Quality!

TYPE A-10		TYPE A-25	
1,000 Volts DC Test		2,500 Volts DC Test	
Cap. Mfd.	Price	Cap. Mfd.	Price
.0001	\$.24	.0001	\$.42
.00025	.24	.00025	.42
.0005	.24	.0005	.42
.001	.30	.001	.54
.002	.30	.002	.81
.003	.36	.003	.93
.005	.42	.005	1.05
.006	.51	.006	1.05
TYPE A-50		Volts DC Test	
Cap. Mfd.	Price	Cap. Mfd.	Price
.0001	\$.54	.001	\$.90
.00025	.63	.0015	1.17
.0005	.75	.002	1.35

TRANSMITTING MICA CONDENSERS

RATED + OR - 10%

1,000 Volts D.C. Test				Type 4				Type 9			
Cap.	Mfd.	Price	Type 4	Cap.	Mfd.	Price	Type 9	Cap.	Mfd.	Price	Type 9
.00005	.00005	\$.21	\$.24	.00005	.00005	\$.36	\$.42	.00005	.00005	\$.42	\$.54
.00007	.00007	.21	.24	.00007	.00007	.36	.42	.00007	.00007	.42	.54
.0001	.0001	.21	.24	.0001	.0001	.36	.42	.0001	.0001	.42	.54
.0002	.0002	.21	.24	.0002	.0002	.36	.42	.0002	.0002	.54	.63
.00025	.00025	.21	.24	.00025	.00025	.36	.42	.00025	.00025	.54	.63
.0005	.0005	.21	.24	.0005	.0005	.36	.42	.0005	.0005	.75	.90
.001	.001	.24	.30	.001	.001	.45	.54	.001	.001	.90	1.05
.002	.002	.27	.30	.002	.002	.57	.81	.002	.002	1.35	1.65
.003	.003	.33	.42	.003	.003	.72	.93	.003	.003	1.55	1.95
.005	.005	.33	.42	.005	.005	.90	1.05	.005	.005	1.95	2.25
.006	.006	.39	.51	.006	.006	1.02	1.05				
.01	.01	.48	...	.01	.01	1.41	...				
.02	.02	.72	...								



Type 86

NEW! CORNELL-DUBILIER CERAMIC CASE—HIGH VOLTAGE

High Amperage Mica Capacitors

Type 86 Condensers are hermetically sealed—capacity remains constant. Recommended for amateur and broadcast station plate blocking, grid and tank condenser applications.

Cat. No.	Cap. Mfd.	Max. Volts	Max. Amps. at 80 Meters	Your Cost
45A-86	.00005	12,500	1.5	\$2.25
31A-86	.0001	12,500	3	2.25
325A-86	.00025	12,500	6	2.25
35A-86	.0005	12,500	8	2.55
21D-86	.001	3,500	8	2.25
21C-86	.001	7,000	10	2.55
21A-86	.001	12,500	11	3.00
22D-86	.002	3,500	9	2.55
22C-86	.002	7,000	10	3.15
22A-86	.002	12,500	13	3.90
23A-86	.003	12,500	13	4.80
25C-86	.005	7,000	12	4.20
25B-86	.005	10,000	14	5.70
11D-86	.01	3,500	14	4.20
11C-86	.01	7,000	15	5.70

Write for C-D Catalog on Other Type 86 Capacities.

ALL-WEATHER PORCELAIN CASE MICA CONDENSERS



Ratings guaranteed plus or minus 10%. Severe tests have proven that F.M.C. Porcelain Case Mica Condensers will maintain their ratings under the most severe climatic and atmospheric changes. Will stand hard usage. Porcelain will not carbonize and form a track for leaks and shorts when subjected to high voltages. Thoroughly guaranteed. Test voltage 5,000 D.C.

Working Voltage 2,500 D.C.—Size 1½x5½x7/32 to 9/32 Inches.					
Cat. No.	Cap. Mfd.	Price			
BC1501	.00005	\$.42	BC1514	.0005	\$0.48
BC1505	.0001	.42	BC1518	.001	.48
BC1507	.00015	.42	BC1520	.002	.66
BC1509	.0002	.42	Cat. No.	Cap. Mfd.	Price
BC1510	.00025	.42	Working Voltage 1,750 D.C.		
BC1511	.0003	.48	BC1522	.003	\$0.54
BC1513	.0004	.48	BC1524	.005	.66
			BC1524	.005	.72
Working Voltage 1,000 D.C. Test Voltage 2,000 D.C.					
C1255	.0001	\$.18	BC1268	.001	\$0.21
C1260	.00025	.18	BC1270	.002	.27
C1264	.0005	.18	BC1272	.003	.33

POLYMET MICA CONDENSERS

Not Midget Type—Size 1 1/2 x 1 1/2 x 3/16 in.

1,000 volts DC test. Type MAK



CAPACITIES	Price	CAPACITIES	Price
.00005 MFD.	\$.12	.001 MFD.	\$.18
.0001 MFD.	.12	.002 MFD.	.20
.0002 MFD.	.12	.005 MFD.	.25
.00025 MFD.	.12	.006 MFD.	.33
.0005 MFD.	.12	.01 MFD.	.40
.00075 MFD.	.15	.02 MFD.	.55

"NET PRICES"

TRANSMITTING KEYS...EARPHONES

SPEEDX KEYS

No. 301—Moulded bakelite base, coin silver contacts. Metal parts chrome plate. Each\$1.10

No. 302—Same as No. 301 except has ¼ in. contacts. Each\$1.25

No. 321—Heavy-duty type, ¼ in. coin silver contacts. All chrome plated....\$1.95

No. 320—Same as No. 321 except has black crinkle base\$1.80

No. 311—Standard key. Has provisions for plugging in SpeedX Bugs. All chrome plated.....\$1.50

No. 310—Same as No. 311 except has black crinkle base\$1.35

No. 400—Constant frequency buzzer, bakelite top and base, adjustable, resist. 2 ohms\$0.65

No. 350—Bakelite replacement knob.....\$0.12

No. 450—Practice Set. No. 301 key and No. 400 buzzer mounted on base.....\$1.95

NEW SPEEDX "BUGS"

One of the finest automatic keys ever made.

Balanced to perfection and fully adjustable to give plenty of pep and life.

Fully Adjustable. Can be slowed down to eight words per minute or geared to as high a speed as desired. Standard construction throughout. Precision adjustment at all points. Solid ¼ in. pure silver contacts. Heavy construction throughout. Will hold adjustment at ALL speeds.

No. 500—Black base\$6.90

No. 501—Chrome base 7.50

JUNIOR HI-SPEED KEY

The Junior No. 510 Key is a smaller model of the popular No. 500 HI-SPEED key. Fully adjustable to give plenty of PEP and LIFE. A favorite of the amateur who prizes his clean cut sending.

No. 510—Black base\$5.70

No. 511—Chrome base 6.30

Guarantee—Every SPEEDX HI-Speed Key is manufactured to the highest standard of quality and is unconditionally GUARANTEED.

"SIGNAL" KEYS

NEW!
\$0.90

The new Signal Sales Leader. Heavy cast base, well insulated, black crackle finish, ¼ in. coin silver contacts, nickle-plated parts and compo. knob. A real value. No. R-50.....\$0.90

STANDARD TELEGRAPH TYPE KEY

The Key with the "Feel" Platinor contacts, rated at ¼ Kw. Polished key lever and lacquered parts. No. R-48.....\$1.65

SIGNAL HEAVY DUTY KEY

All brass construction with lacquer finish. ¼ in. coin silver contacts; navy type knob. No. R-63\$2.40
No. R-64—¾ in. contacts..... 2.55

Signal R-60—Hi-frequency buzzer. Adjustable. Resist. 2 ohms. \$0.85

SIGNAL PRACTICE SETS

R-68—Set consists of a key and an adjustable high frequency buzzer on mahogany finished board on which code is printed. A quality set.....\$2.00

R-69—Code practice set. Consists of a key and a non-adjustable buzzer on a metal base on which the code is printed. Good quality. R-69.....\$1.05

NAVY KNOB

You should have one on your key.
No. 360.....\$0.15

ACME LIGHT-WEIGHT DE LUXE EARPHONES

New 1936 Type

Exceptionally efficient, small, low price head phones for amateurs or any other use requiring high grade, light weight, comfortable head phones at low cost. Size 11/16 in. deep, 2 in. diameter. Weight, complete headset, 5 oz.

The new "De Luxe Type" have molded composition caps.

No. D2M—2,000 ohms.....\$1.35
No. D4M—4,000 ohms..... 1.50

With Metal Caps

No. A2M—2,000 ohms.....\$0.98

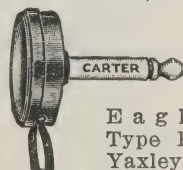
PHONE PLUGS

Bud long handle type.

No. 230...\$0.24

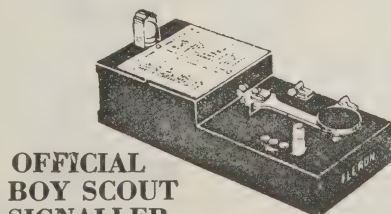


No. 230



Carter flat type.
\$0.30

Eagle "Quick-Change" Type Plug.....\$0.15
Yaxley long handle type. No. 75.....\$0.29

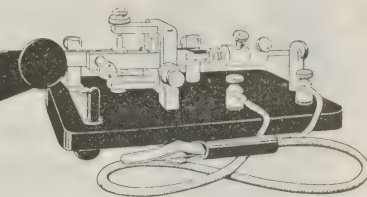


OFFICIAL BOY SCOUT SIGNALLER

Radio-Blinker-Telegraph—Consists of high pitched buzzer, light blinker and telegraph sounder operated from two No. 2 Burgess flashlight cells. Code is printed on instrument. Sturdy all-metal construction.

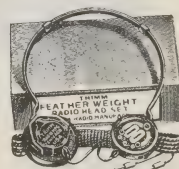
No. 1095—Without batteries.....\$0.90

"NET PRICES"



TRIMM Featherweight EARPHONES

The 4-oz. Comfortable Phones



The most sensitive and comfortable earphones ever made. For amateurs, hard-of-hearing, hospitals, etc. Shock-proof. No. F-100—4,000 ohms\$6.00
No. F-106—24,000 ohms. Use these for utmost sensitivity..... 6.00

TRIMM DEPENDABLE

PHONES

Bakelite shell and cap, 2,000 ohms. No outside terminals. No. 65 \$1.80



BRUSH CRYSTAL HEADPHONES

Super-Sensitive High Fidelity Lightweight

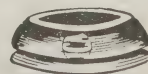
Frequency response from 60 to 10,000 cycles. High impedance and great sensitivity permit them to be used from any source. Plate voltage must be fed by blocking condenser with current carried by a choke or resistor—10,000 to 100,000 ohms (not critical). Weigh only 6 oz. Different and better.

Type BAP.....\$5.40



Double phone cord, 5 ft.

Good quality. No. 192....\$0.24



Rubber cushions for earphones. No. 195—Per pair\$0.45

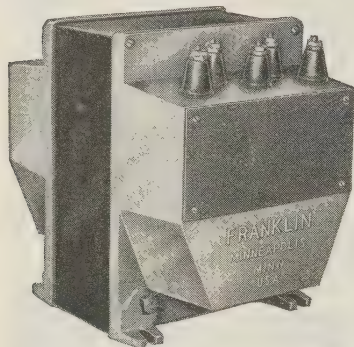


FRANKLIN

Designed by **BOYD PHELPS—W2BP—W9BP**

This is the 1936 listing of the complete line of Franklin Transmitting Transformers, Chokes and Audio Units designed especially for amateurs by the famous Boyd Phelps.

PLATE SUPPLY TRANSFORMERS



Type K.

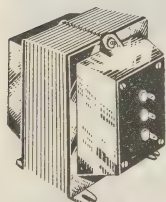
All Franklin Transformers listed are for 110 volt 60 cycle input. We can supply transformers, in a hurry, for other inputs and also for different secondary voltages and currents. Ask us to quote on your specifications.

"RECEIVING" LOWER VOLTAGE TRANSFORMERS ON PAGES 62-63

★ **FT-3** ★
Type H or K
750-0-750 Volts-300 M. A.
7½ V.-3 Amp.
5 V.-3 Amp.
7½ V.-3 Amp.
5¾" x 6" x 6¼"
\$7.30

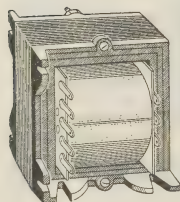
FTP-4
Type H or K
1000-750-0-750-1000
Volts
300 M. A.
300 V. A.
5¾" x 6" x 6¼"
\$8.90

FTP-1
Type H or K
1500-1000-0-1000-1500
Volts
175 M. A.
262 V. A.
5¾" x 6¼" x 6¼"
\$11.25



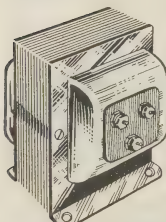
Type H.

FT-182
Type D
350-0-350 Volts-200 M. A.
5 V.-3 Amp.
2½ V.-3 Amp. C. T.
2½ V.-7 Amp. C. T.
3¾" x 3" x 4½"
\$4.95



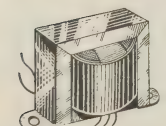
Type D.

FT-6
Type H
400-0-400 Volts-100 M. A.
7½ V.-3 Amp.
7½ V.-3 Amp. C. T.
3¾" x 5¼" x 4¾"
\$4.40



Type G.

FT-282
Type D
450-0-450 Volts-200 M. A.
5 V.-3 Amp.
2½ V.-3 Amp.
2½ V.-9 Amp.
3¾" x 5¼" x 4½"
\$5.50



Type F.

FTP-51
Type H
500-0-500 Volts
300 M. A.
150 V. A.
3¾" x 5¾" x 4¾"
\$6.00

FTP-7
Type D
500-0-500 Volts
150 M. A.
75 V. A.
3¾" x 5¼" x 4¾"
\$5.60

FT-11
Type H or K
600-0-600 Volts-250 M. A.
2½ V.-4½ Amp.
5 V.-3 Amp.
3¾" x 5¾" x 4¾"
\$6.50

FT-284
Type H
600-0-600 Volts 150 M. A.
7½ V.-3 Amp.
5 V.-3 Amp.
3¾" x 5¾" x 4¾"
\$5.90

FT-283
Type H
600-0-600 Volts-150 M. A.
7½ V.-3 Amp.
5 V.-3 Amp.
3¾" x 5¾" x 4¾"
\$5.90

FTP-8
Type H
750-0-750 Volts
200 M. A.
150 V. A.
3¾" x 5¾" x 4¾"
\$6.50

FTP-52
Type H or K
1500-1000-0-1000-1500 Volts
600 M. A.
900 V. A.
5¾" x 9½" x 6¼"
\$18.00

FTP-2
Type H or K
2000-1500-0-1500-2000 Volts
250 M. A.
500 V. A.
5¾" x 7½" x 6¼"
\$15.95

FTP-5
Type H or K
2500-1500-0-1500-2500 Volts
250 M. A.
625 V. A.
5¾" x 8½" x 6¼"
\$17.75

FTP-53
Type H or K
3000-2000-0-2000-3000 Volts
200 M. A.
600 V. A.
5¾" x 9" x 6¼"
\$21.00

FTP-54
Type H or K
3000-2000-0-2000-3000 Volts
350 M. A.
1000 V. A.
5¾" x 10" x 6¼"
\$25.00

FTP-55
Type H or K
0-1000-1100-1200 Volts
(BRIDGE)
300 M. A.
360 V. A.
5¾" x 6" x 6¼"
\$7.50

FTP-56
Type H or K
0-1000-1100-1200 Volts
(BRIDGE)
600 M. A.
720 V. A.
5¾" x 7½" x 6¼"
\$9.50

Use above two transformers with No. FTF-46 in Bridge Circuit.

"NET PRICES"

TRANSFORMERS

Designed by Boyd Phelps - - - W2BP-W9BP

We believe that the new line of Franklin transformers designed by Boyd Phelps offer the amateurs the "most sock per dollar" of any transformers made. Franklin transformers are fully guaranteed for one year.

FILAMENT TRANSFORMERS—CHOKES

SPECIAL COMPLETE FILAMENT TRANSFORMERS

Designed to fit the needs of the average Amateur Station

Either of the two types below permit the use of primary keying of a separate plate supply transformed which avoids key clicks and high no-load filter voltages. With separate plate and filament transformers, it is convenient to delay the high voltage until all filaments are correctly heated, as recommended by tube manufacturers especially in the case of mercury vapor types. Transmitter filaments may be left lit while receiving but ready for instantaneous "come-back" or "breaks" and steadier filament voltages result from the use of separate transformers.

The normal 110 volt primary in either type below is tapped at about 103 volts so a primary rheostat may be used to accurately adjust the filament voltages for wide line voltage changes.

FTF-70

For Low and Medium Power

2.5 Volts—6 Amps. C.T.—1000 volt insulation
7.5 Volts—6½ Amps. C.T.—1000 volt insulation
2.5-5 Volts—3 Amps. C.T.—1500 volt insulation
For 47's, 46's, 59's, 800's, 10's, etc.

Type D case
\$4.50

FTF-71

For Low and High Power Stages

2.5 Volts—6 Amps. C.T.—1000 volt insulation
7.5 Volts—6½ Amps. C.T.—1000 volt insulation
10.0 Volts—10 Amps. C.T.—2500 volt insulation
2.5 Volts—10 Amps. C.T.—7500 volt insulation
5.0 Volts—20 Amps. C.T.—7500 volt insulation
For 46's, 47's, 59's, 800's, 10's, 03A's, 852's, 860's, 866's, 872's, 83's, 5Z3's, etc.

Type H or K case

\$9.00

7,500 VOLT INSULATION

FTF-40—TYPE H OR K

2.5 Volts—10 Amp. C. T.
For 866's

\$5.25

FTF-50—TYPE H OR K

5.0 Volts—20 Amp. C. T.
For 872's

\$5.60

FTF-10—TYPE H OR K

7.5 Volts—3 Amp. C. T.
7.5 Volts—3 Amp. C. T.
For 10's, 800's, etc.

\$5.25

FTF-20—TYPE H OR K

10 Volt—10 Amp.
For 03A's, 852's, etc.

\$5.60

FTF-25—TYPE H OR K

11 Volts—10 Amp. C. T.
For 04A, 851, 849, etc.
Use primary rheostat

\$5.60

FTF-30—TYPE H OR K

12 Volts—8 Amp. C. T.
For 11 volt tubes—with primary rheostat

\$5.60

1,000 VOLT INSULATION

FTF-41—TYPE C

2.5 Volts—12 Amp. C. T.
5 Volts—3 Amp. C. T.

Type C

\$1.45

FTF-42

2.5 Volts—12 Amp. C. T.
2.5 Volts—3 Amp. C. T.
5 Volts—3 Amp. C. T.

Type C

\$1.65

For C. T. Keying

FTF-43—TYPE C

7.5 Volts—3 Amp. C. T.
5 Volts—3 Amp. C. T.

\$1.45

FTF-44—TYPE F

2.5 Volts—5 Amp. C. T.

\$1.15

FTF-45

7.5 Volts—3 Amp. C. T.

Type C

\$1.15

FRANKLIN AMATEUR TRANSMITTING TRANSFORMERS

The famous Boyd Phelps of W2BP and W9BP fame is now the FRANKLIN designing engineer. You all know of Boyd Phelps and you also know that Boyd Phelps is a real "Leader" when it comes to figuring out what the hams want and need. In Mr. Guy Pugh, president of the FRANKLIN TRANSFORMER MFG. CO., Phelps has the support of one who is more than anxious to secure and satisfy the amateur trade. This brilliant and hard-working combination of Guy Pugh and Boyd Phelps assures you of these things:

Latest Developments—Highest Quality—and Prices You Can Afford To Pay.

For—"The Most SOCK Per Dollar"

—Use Franklin Transformers.

FILTER REACTORS SWINGING CHOKES AUDIO CHOKES

Type	Illus.	L.	Size W.	H.	Henries	M.A.	Ohms	Insulation	Price
F-981	F	2 3/8	1 3/4	2	750	5	3500	500	\$1.40
F-650	G	2 3/8	2 3/4	3 1/4	50	80	400	1000	2.00
F-700	G	2 3/8	2 3/4	3 1/4	30	100	200	1500	1.80
FTC-2	H	3 3/4	3 3/4	4 1/2	30	150	200	5000	4.50
F-991	K	3 3/4	3 3/8	4	30	200	90	1500	3.30
FTC-1	K	3 3/4	5 3/4	4 3/4	30	300	150	7500	8.85
FTC-4	K	3 3/4	5 3/4	4 3/4	30	500	100	7500	10.60
F-990	F	2	1 1/4	1 5/8	20	30	450	1000	.75
F-975	F	2 3/8	1 3/4	2	20	60	500	1000	.95
F-993	F	2 3/8	1 3/4	2 1/4	20	80	250	1000	1.13
F-994	G	2 3/8	2 3/4	3 1/4	20	100	200	1500	2.10
F-995	G	3 3/4	3 3/8	4	20	200	50	2500	3.30
F-986	F	2 3/8	1 3/4	2	10	60	300	2500	.95
FTC-7	G	2 3/8	2 3/4	3 1/4	10	150	100	1000	2.00
FTC-8	G	3 3/4	3 3/8	4	10	150	100	5000	3.60
FTC-12	H	3 3/4	3 1/2	4 1/2	10	350	100	5000	5.00
FTC-3	K	3 3/4	5 3/4	4 3/4	10	500	70	5000	8.00
FTC-5	G	2 3/8	2 3/4	3 1/4	25-5	150	135	1000	2.00
FTC-9	G	3 3/4	3 3/8	4	25-5	150	100	5000	3.60
FTC-11	H	3 3/4	3 1/2	4 1/2	25-5	350	100	5000	5.00
FTC-10	K	3 3/4	3 3/8	4	25-5	500	70	5000	8.00

BRIDGE RECTIFIER FILAMENT TRANSFORMERS

Cat. No.	Volts	Amps.	Insulation	Size
FTF-46	5	6.C.T.	1500	
	5	3.C.T.	1500	3 1/4"x3 1/4"x4"
	5	3.C.T.	1500	

Type D case

\$2.60

BRIDGE RECTIFIER
4-83's, giving 1000 volts
500 M.A. (QST July, '33)
Use with transformers
FTP55 or FTP56.

Cat. No.	Volts	Amps.	Insulation	Size
FTF-48	2.5	10.C.T.	6000 V.	
Type D	2.5	5.C.T.	6000 V.	3 3/4"x4"x4 1/2"
case	2.5	5.C.T.	6000 V.	

\$4.40

BRIDGE RECTIFIER
4-866's, giving 6000 volts
at 400 M. A.

OTHER FILAMENT TRANSFORMERS

FTF-49
7.5 Volts—6.5 Amp. C. T.
For pair 800, 841, 825,
RK20, etc.
1000 volt insulation
Type C\$1.65

FTF-47
2.5 Volts—10 Amp. C. T.
For 866's
★ 3000 volt insulation ★
Type C\$1.50

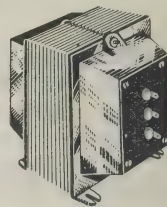
FTF-72
10 Volts—10 Amps. C. T.
For 03A, 11, 52, etc.
2500 volt insulation
Type H\$3.40

Franklin Transformers and Chokes are unconditionally guaranteed for one year.

"NET PRICES"

FRANKLIN *Class B* TRANSFORMERS

These Class B Transformers on this page are an entirely new line re-designed by Boyd Phelps. They are "Quality" all the way through and will stand up under the heavy loads they are subjected to in Class B service—the insulation being extra heavy. Many of the good quality "fones" you hear are using Franklin Class B Transformers.



RECOMMENDED CLASS B MODULATION COMBINATIONS

Audio Watts ➡.....	5.5	20	50	100	200	500
Driver Tubes ➡.....	1-89	1-46	2-45	2-2A3	2-2A3	2-250
Plate Volts.....	180	250	250	250	250	450
Plate M. A.....	20	22	68	120	120	110
Bias Volts.....	—22	—33	—50	—45	—45	—84
Type Input Transformers..	F-564	F-560	F-580	F-286	F-286	F-289
Price	\$2.25	\$2.25	\$2.25	\$3.75	\$3.75	\$5.75
	Type G	Type G	Type G	Type G	Type G	Type G
Class B Tubes.....	1-79	2-46	2-210	2-800	2-203A	2-204A
Plate Volts.....	180	400	600	1000	1000	2500
Peak Plate M. A.....	100	200	230	250	500	1250
Av. Mod. M. A.....	65	125	150	165	320	780
Bias Volts.....	0	0	—67	—55	—30	—80
Type Output Transformers	F-565	F-559	F-581	F-288	F-287	F-290
Price	\$2.25	\$3.30	\$5.70	\$8.75	\$12.50	\$45.00
	Type G	Type G	Type H	Type H or K	Type H or K	Type J
Class C—R. F.						
Plate Volts.....	180	500	750	1000	2000	1000
Plate M. A.....	45	100	150	200	100	400
Equivalent Load Resistance.....	4000	5000	5000	5000	20000	2500
					10000	4000

GRID MODULATION TRANSFORMER

No. F-532—From a pair of 245's into a load of 2,500 ohms, will modulate 1—852 or from a pair of 2A3's into 1,250 ohm load will modulate pair of 852's\$3.50

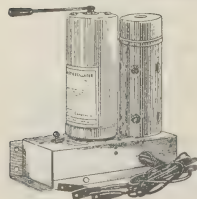
TRANSFORMER UNITS

Ultra Short Wave

2½, 5 and 10 Meter Transceiver Transformers

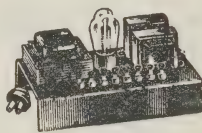
No. F-532B—Combination mike and interstage transformer for transceiver. Type F case.....\$0.90
 No. F-533B—Transceiver output transformer—33, 38, 41, etc., to 130, 1,000 or 2,000 ohm phones. Type F case.....\$1.00
 No. F-536B—Transceiver transformer for Type 19 tube. Similar to F-532B but huskier and will stand more power. Has detector plate winding and mike winding working into grid of following tube, usually a 30 Class B driver. Type F case.....\$1.05
 No. F-534C—Class B input, 30 driver to 19 (twin) Class B. Type F case.....\$0.80
 No. F-535B—Class B 19 tube output transformer to modulate a 19-inch Class C R.F. Load resistance approximately 2,700 ohms. Type F case.....\$1.15

RCA BEAT OSCILLATOR



A compact C-W Oscillator; enables you to listen to code signals, or tune in weak stations on any broadcast or SW Superhet receiver. Leads are provided for quick attachment to any receiver using 2.5 V. or 6.3 V. tubes. Has a frequency range of from 415-700 KC with vernier adjustment of pitch. Electron-coupled circuit insures stability; requires 1—58, or 1—6D6 tube (not included). Size 7x2½x7 inches; weight 2 lbs.
 No. 9606—Price.....\$7.50

GENERAL ENGINEERING CORP. INEXPENSIVE PURE D. C. POWER PACKS MODEL XPC.



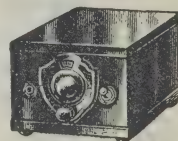
An efficient power supply for Short Wave receivers or small transmitters using 2—45 tubes. Delivers 300 volts pure D.C. at 65 M.A., tapped at 180, 90 and 22½ volts. Also supplies 2½ volts C.T. at 3 amps. for filaments. Requires type 80 tube. Mounted on sturdy steel chassis finished in green enamel. Completely wired and tested.
 Price.....\$4.95

POWER PACK FOR S. W. SETS

Especially designed for Short Wave receivers. Hum-free. Substantially and neatly built. Delivers 250 volts D.C. at 40 M.A., tapped at 22½ and 90 volts; 2½ volts C.T. at 5 amps. for filaments. Chassis size, 7½x4x1½ inches. Weighs 4 lbs. Requires one 80 tube. Model J. Price.....\$4.95

GENERAL LISTENING MONITOR

A compact well-built unit for amateur use. Permits station monitoring and checks on frequency drift. Furnished complete with coils for 20, 40 and 80 meter amateur bands. Self-contained in a neatly finished steel case 5x7x10 inches. Requires 1—99 tube, 1—3 V. "C" battery and 1—22½ V. battery (not supplied).
 Price.....\$3.95



NATIONAL UM CONDENSERS



Ultra Midgets designed for ultra H. F. use. Fit inside shield cans. Long shaft extension furnished.
 Cat. No. Cap. Price
 UM 15 15 \$0.75
 UM 35 35 .90
 UM 50 50 .95
 UM 75 75 1.00
 UM100 100 1.14
 Cat. No. Cap. Price
 Double spaced.
 UMA25 25 \$1.10
 Balanced stat., single spaced.
 UMB25 25 \$1.10

THORDARSON TRANSFORMERS

PLATE, FILAMENT AND CLASS B TRANSFORMERS » POWER CHOKES

Thordarson is one of the real "names" in the amateur game—and the name Thordarson has always stood for reliability. You can depend on Full Ratings on all Thordarson products. Now, Thordarson offers "Matched Power Units." Write for Thordarson "Amateur Transmitter Guide," which gives you a great deal of information on Power Supplies. Your copy is FREE.

PLATE TRANSFORMERS

Cat. No.	For These Tubes	Type No.	D. C. From Filter		Sec. A. C. Volts	Size	Price
			Volts	MA.			
T-7041	10-841-865	A	525	250	725	6 1-4"x4 1-2"x5"	\$ 6.00
T-6412	800-825-RK18	J	750	350	980	8" x6 3-4"x6 1-4"	10.80
T-6282	03A-11-845	J	1000	500	1335	8" x6 3-4"x8"	21.00
T-6411	800-RK20-830B	J	1000	280	1290	8 1-4"x6 3-4"x7"	13.80
T-7033	800-RK20-830B P. P. 203A	J	1250	500	1600	11" x6 3-4"x6 1-2"	24.00
T-6283	852-04A	J	2000	250	2350	8" x6 3-4"x8"	21.60
T-6284	852-04A-849	C	2000	500	2420	13 1-2"x8" x7 1-4"	33.60
T-7351	852-50T-150T	J	1500	500	1950	11" x6 3-4"x7 1-2"	28.80
T-6285	852-849-851	C	1750	380	2275	13 1-2"x8" x7 3-4"	39.00
T-5489	800-RK20-03A	J	3000	400	3630	7" x8" x7"	13.20
T-5448	10-800-825	M	1000	150	1270	4 3-8"x3 3-4"x6"	4.50
T-6257	10-800-825	M	680	200	800	4 3-8"x3 7-8"x6"	6.00

FILAMENT TRANSFORMERS—All Primaries 115 V. 60 Cycle, except * which are 105, 110, 115 Volts

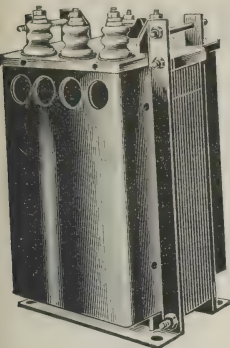
Cat. No.	For These Tubes	Type No.	Fil. Volts		Insulation	Size	Price
			Amps.	MA.			
T-5455	45, 46, 47, 59	M	2.5 C. T.	10.0	1600	3 3-4"x3" x2 3-4"	\$ 1.65
*T-6413	10-841-RK18	OO	7.5 C. T.	2.5	1600	2 1-2"x3 3-8"x2 5-8"	2.10
*T-6433	866's	OO	2.5 C. T.	10	7500	3 1-4"x3 3-4"x3 1-2"	3.60
*T-6421	866's-83	I	5.0 C. T.	3	3000	3 3-4"x4 1-4"x3 3-4"	3.60
*T-7423	50T	OO	2.5 C. T.	10	1600	4" x3 3-8"x3 1-2"	3.30
*T-7424	150T	OO	5.0 C. T.	12.0	1600	4 5-8"x3 7-8"x3 7-8"	4.80
*T-6414	03A, 52, 838	O	5.0 C. T.	20.0	1600	4" x3 3-8"x3 5-8"	3.30
			10.0 C. T.	6.5	1600		4.30

CHOKES—INPUT AND FILTER

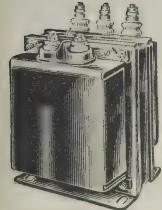
Cat. No.	Purpose	MA. Current	Henries Under Load	D. C. Resistance	Insulation	Size	Type	Price
T-6405	Input	150	9.85	200	2000	4" x4" x3 1-2"	O	\$ 3.00
T-6409	Filter	150	19.7	275	2000	4 5-8"x3 7-8"x4 1-8"	O	3.60
T-6315	Input	280	12.3	175	5000	6 3-4"x4 1-2"x4 3-8"	G	5.10
T-6408	Filter	280	23.6	190	5000	6 3-4"x5" x4 3-8"	G	6.00
T-6406	Input	380	10.4	93	5000	6 3-4"x5" x4 3-4"	G	7.20
T-6407	Filter	380	20	160	5000	7 1-2"x6 3-4"x6 3-8"	G	9.60
T-6316	Input	500	8.2	70	5000	6 3-4"x4 1-8"x5"	G	8.40
T-6410	Filter	500	16.5	110	5000	7 1-2"x6" x6 3-8"	G	10.20
T-5517	Input	400	25.6	118	3000	6 7-8"x6 3-4"x6 7-8"	G	10.80
T-5450	Filter	250	12.9	120	1600	3 7-8"x3 1-4"x4 5-8"	M	3.00
T-2353A	Input	200	5	80	1600	3" x3 1-4"x3 3-4"	OO	2.10
T-6749	Input	200	5	80	1600	3" x3 1-4"x3 3-4"	OO	1.95
T-1700	Filter	130	8.75	230	1600	3" x3 5-8"x3 7-8"	OO	2.10
T-4991	Input	120	4.2	160	1600	2 1-2"x2" x2"	H	.80
T-5319	Filter	120	7.2	290	1600	2 3-8"x2" x2"	M	.80

CLASS B AUDIO TRANSFORMERS

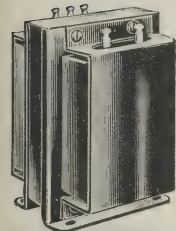
Cat. No.	Purpose	Type No.	Driver Stage Tubes	Class B Stage Tubes	Load Ohms	Watts	Size	Price
T-5463	Input	H	One-30	19			3" x1 1-2"x2 3-8"	\$ 1.65
T-6769	Output	H	One-30	19	2700	3.5	1 7-8"x2" x2 3-8"	1.80
T-6747	Input	H	One-53 or 6A6	53			2 7-8"x2" x2 3-8"	1.65
T-6750	Input	H	One-89	79			2 7-8"x2" x2 3-8"	1.65
T-6759	Output	H	One-89	53, 6A6 or 79	3000	5.5	3 3-8"x2 1-2"x3"	2.10
T-5100	Input	O	P. P. 45's	Pair 10's			3 3-4"x3 1-2"x3"	3.00
T-7510	Input	O	P. P. 2A3's	838's			4" x3 3-8"x3 5-8"	3.60
T-6425	Output	O		Pair 10's	5000 10000 4500 6250 12500	50	3 3-4"x4 1-2"x4 1-2"	5.40
T-7084	Output	N		801's			6 1-4"x5 7-8"x8"	8.10
T-6698	Input	H	P. P. 46's or 59's	4-46's or 59's			4 1-8"x2 3-4"x3"	3.15
T-6699	Output	N		P. P. Par. 4-46's or 59's P. P. Par.	500 3500 6250	45	6 1-2"x5 3-4"x8"	9.60
T-5289	Input	O	One 46 or 59	Pair 46's or 59's			3" x3 3-4"x3 1-2"	2.40
T-6426	Output	O		Pair 46's or 59's	5000 10000	24	3" x3 3-4"x3 1-2"	3.90
T-6422	Input	O	P. P. 45's or 2A3's	Pair 800, 830B, RK18, etc.			2 3-4"x4 1-8"x3"	3.00
T-6423	Output	N		Pair 800, 830B, RK18, etc.	5000 20000	190	6 1-2"x5 3-4"x8"	9.60
T-6140	Input	O	P. P. 2A3's	Pair 03A's, 11's			3" x3 3-4"x3 1-2"	3.60
T-6424	Output	N		Pair 03A's, 11's	2500 10000 2500 10000	200	7 1-2"x5 3-4"x8 1-2"	14.40
T-7511	Output	N		838's			7 1-4"x5 7-8"x8 1-2"	14.40
T-7201	Input	H	P. P. 56's	P. P. 45's AB			3" x2 1-2"x2 1-2"	2.25
T-5870	Input	H	P. P. 56's	P. P. 2A3's AB			3" x2 1-2"x2 1-2"	2.25



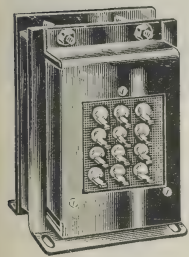
TYPE C



TYPE J



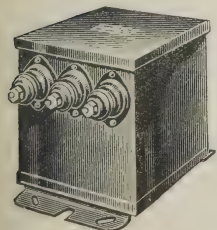
TYPE A



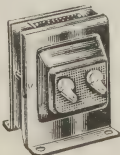
TYPE I



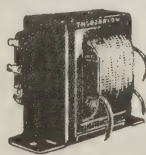
TYPE G



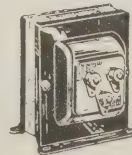
TYPE N



TYPE H



TYPE M



TYPE O

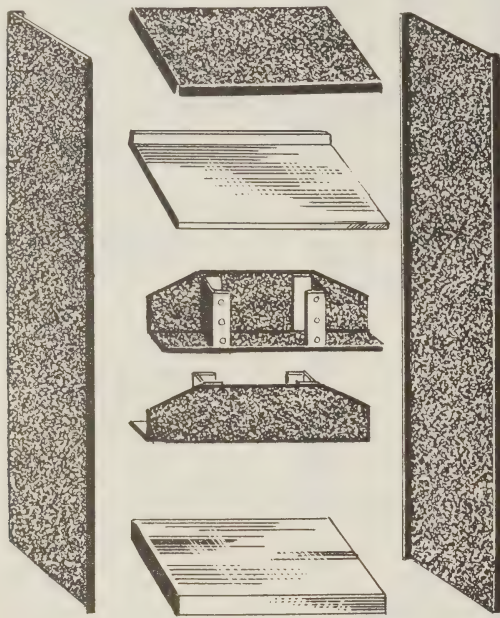


"NET PRICES"

METAL RACKS—CANS—PANELS

W9LIP SPECIAL
★ ★ ★ ★
TRANSMITTER RACKS

We studied this situation over carefully, questioned a lot of Hams as to what they wanted in a transmitter rack. Here are the results: A flexible layout that permits expansion as you desire to enlarge your rig. The appearance of your finished transmitter will greatly please you—you'll have that "commercial" appearance that all Hams want. The black crackle finish is just the way you want—a fine texture—not coarse as is found in some finishes of this type. The workmanship on all the units is of the best. We are willing to sell these units to you on a basis of "Money cheerfully refunded if they do not please you." Build your new rig in a W9LIP Special Transmitter Rack.



SIDE PIECES. These metal side pieces are the backbone of our whole rack and panel layouts. As shown in the illustration above these pieces have a bend outward in the front and inward in the rear. This permits the proper fastening of the panels in the front and mounting of any screen desired in the rear. The bend in the rear also will cover any wiring cables from view. These pieces are finished completely in black crystalline.

Cat. No.	H.	D.	Price Each Thick. Panel
SP-A	60x14 in.	14 gauge	\$1.95
SP-B	60x11 in.	14 gauge	1.85
SP-C	48x14 in.	14 gauge	1.45
SP-D	48x11 in.	16 gauge	1.35

TOP COVERS—Designed to correctly fit on top of the above sides, furnishing that "complete" appearance to the whole unit. Finished in black crystalline. **Two sizes.**

ST-G—20x14 in.....\$0.80 | ST-H—20x11 in.....\$0.70

SHELVES—Made of 16 gauge leaded steel. By using these shelves, you get a perfect arrangement for chassis support as well as complete shielding between each chassis unit of your transmitter. These shelves have an upward bend extension in the rear and a down bend in front.

SS-I—12x19 $\frac{3}{4}$ in.....\$0.55 | SS-J—9 $\frac{1}{2}$ x19 $\frac{3}{4}$ in.....\$0.50

CHASSIS—Two types. Aluminum and leaded steel. The aluminum chassis are recommended for R.F. units and the leaded steel for power supplies. Both are supplied in 16 gauge material and are 2 inches deep.

Steel		Aluminum	
SC-KS—12x19 $\frac{3}{4}$ in.....	\$0.70	SC-KA—12 x19 $\frac{3}{4}$ in....	\$1.25
SC-LS— 9 $\frac{1}{2}$ x19 $\frac{3}{4}$ in.....	.55	SC-LA— 9 $\frac{1}{2}$ x19 $\frac{3}{4}$ in....	.95

BOTTOM SUPPORTS—Made of 14 gauge steel finished in black crystalline. They are constructed so that our side pieces fit right into them—making ideal supports for the whole completed transmitter. These supports are not necessary but go a long way in adding that "factory-built" appearance to the whole layout. They are 20 inches wide and 5 inches high.

No. SB-S Each.....	\$0.60
--------------------	--------

COMPLETE RACK—To introduce the W9LIP Special Racks, we offer this complete unit at a value-plus price. Includes two SPE—Side Pieces; one STH—Top; three SS-J Shelves; two SC-LA—Chassis; two SC-LS—Chassis; one 10x21 in. Panel and three 7x21 in. Panels. Everything necessary for the complete unit—all finished in black crystalline, at the sensational low price of only—No. SVP.....**\$8.95**

METAL PANELS

Finished in black crystalline. Do not confuse these panels with cheap, thin panels listed in some catalogs. Our panels are made of heavy No. 16 gauge in both types.

Leaded Steel		Aluminum	
Size, In.	Price.	Size, In.	Price.
7x10	\$0.35	7x10	\$0.50
7x12	.40	7x12	.60
7x14	.47	7x14	.75
7x18	.58	7x18	.95
7x21	.70	7x21	1.10
8x21	.80	8x21	1.15
9x21	.90	9x21	1.20
10x21	1.00	10x21	1.25
12x21	1.15	12x21	1.35

STEEL CHASSIS BASES

Made of cold rolled annealed steel
cadmium plated. Very nicely
built.



	Size	Price
No. 1520	10x12x3 in.	\$0.90
No. 1521	10x17x3 in.	1.05
No. 1522	10x23x3 in.	1.20
No. 1527	7x12x3 in.	.85
No. 1528	7x17x3 in.	1.00
No. 1529	7x23x3 in.	1.15
No. 1530	5x14x1½ ins. high for 4 or 5-tube receivers	.55
No. 1531	5x14x2½ ins. high for 6 or 7-tube receivers	.55
No. 1532	9x16x2¾ ins. high for 8, 9 or 10 to 12-tube receivers	.75



METAL CANS

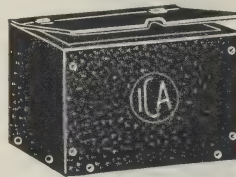
Made of heavy leaded steel. All seams welded, sub-panels included. Finished in attractive black crystallized lacquer. Nice for S. W. receivers, monitors, frequency meters, portable XMTRS.

No. 1SPC—5x5x7 in.....	\$0.90
No. 2SPC—7x9x9 in.....	1.25

RECEIVER CABINETS

Made of heavy leaded steel with a very fine black crackle finish. Each cabinet has a hinged lid, removable bottom and an undrilled chassis that fits. All joints spot welded. Real quality at value-plus prices.

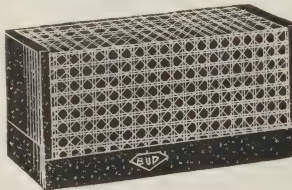
No. SPC-8—7½ in. high, 9 in. deep, 11 in. wide.....	\$2.50
No. B370—7 in. high, 7½ in. deep, 7½ in. wide.....	1.80
No. B372—7 in. high, 7½ in. deep, 14 in. wide.....	2.40



METAL CABINET FOR ALL-STAR SUPERS

Built especially for the All-Stars but will house any set mounted on 8x16 in. panel. Has hinged lid, black crackle finish.

No. B1190—16 in. long, 8 in. high, 8 in. deep.....\$3.00



AMPLIFIER CHASSIS AND COVER

Made of heavy gauge cold rolled steel. Corners are folded over and welded. Shield cover is sheet metal perforated in cane design. Finished in black crackle. Chassis undrilled.

CHASSIS				SHIELD COVERS			
		Size, Inches	Price			Size, Inches	Price
No. F 59—	5x	9½ x 2½	\$0.40	No. FC 59—5	x	5 x 9½	\$0.98
No. F 79—	7x	9½ x 2½	.50	No. FC 79—5	x	7 x 9½	1.05
No. F 812—	8x12	x 3½	.85	No. FC 812—5½	x	8x12	1.25
No. F1117—	11x17	x 3½	1.05	No. FC1117—5½	x	11x17	1.40

COPPER TUBING TRANS. INDUCTANCE

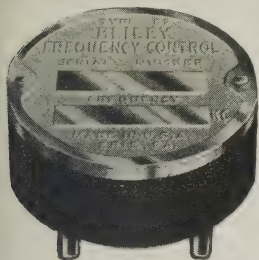
1/8 in. diameter. Net, per ft.....	\$0.05
3/16 in. diameter. Net, per ft.....	.06
1/4 in. diameter. Net, per ft.....	.07
5/16 in. diameter. Net, per ft.....	.08

NICKEL-PLATED THREADED BRASS ROD

For making lead-in bushings from Stand-Off and Thru-Panel Insulators. Threaded $\frac{1}{4}$ -20. Nickel plated.

No. 240—Length, 8 inches.....	\$0.15
No. 241—Length, 10 inches.....	.18
No. 242—Length, 15 inches.....	.24

CRYSTALS - BAKELITE - RESISTORS



BLILEY CRYSTALS AND HOLDERS

New Low Prices!

NEW LOW-DRIFT CRYSTALS

Oven equipment is not necessary as the frequency drift is guaranteed less than 8 cycles which is two-thirds less than that of an X-cut. Guaranteed .003% accurate calibration. Frequency engraved on each name plate. Greater output—excellent for Tri-tets. Choice of 40, 80 and 160 meter bands. Type LD-2—In special holder.....\$4.80
Type HF-2—14,000 to 15,000 Kc., in special holder..... 7.50

BLILEY X-CUT MOUNTED CRYSTALS

Type BC-3—Are power-type, larger, X-cut. In special holders. Can be mounted in any position. BC2-8.....\$1.00
Supplied to specified frequencies within

Mc. Band	10 Kc.	5 Kc.	1 Kc.	Exact F.
7.0, 3.5.....	\$3.95	\$4.90	\$5.90	\$7.50

We carry a large stock of both Bliley LD-2 and BC-3 crystals in stock and can usually come within 5 Kc. of the frequency you want. Exact frequencies in most cases will have to be ordered from the factory at exact frequency prices.

BLILEY CRYSTAL HOLDER

Bakelite, dustproof plug-in, 5-prong tube socket. Can be mounted in any position. BC2-8.....\$1.00
With GR plugs..... 1.50
For 40-meter Xtals, BC2-4..... 1.00



W9FBU JOHN VESEL W9FBU VESEL'S VALUE-PLUS AT-CUT CRYSTALS

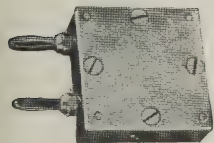
John has been turning out the very best quality AT-Cut Crystals for the past six months. You will find them very stable in operation with practically no frequency drift and extra powerful in output. Vesel's Value-Plus Crystals are the most widely used in the Northwest—they satisfy 100% or your money refunded. Most of you know good ol' John, the Swiss watchmaker at Greenwood, Wis., as he is one of the best phone Hams on the air. John has been grinding crystals for years and you will like his product.

Vesel's Value-Plus AT-Cut Crystals in 160 or 80 meter bands, within 10 Kc. of your specified frequency. Crystal only, no holder.....\$2.65

In Hill Holder, tested..... 3.95
Can be furnished at exact frequency for 25% increased price. We carry a large stock and can usually come within 5 Kc. of your desired frequency.

Vesel's Value-Plus X-Cut Crystals in 160 or 80 meter bands, within 10 Kc. of your specified frequency. Crystal only, no holder.....\$1.50

In 40 meter band, within 10 Kc. of your specified frequency 2.75



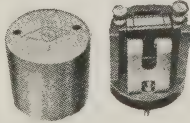
A GOOD QUALITY CRYSTAL HOLDER

With G. R. plugs.

\$1.10 No. BKZ9

NATIONAL CRYSTAL HOLDER

Mounts the crystal in a vertical position which permits it to vibrate freely. Plugs in 5-prong socket. Chrome finish shield over all. Crystals can be easily changed. Type CHT.....\$1.50



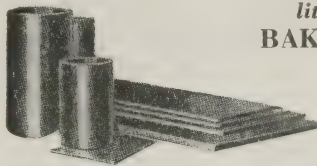
HILL LAB. CRYSTAL HOLDER

Made by Hill, W2TP of Leonia, N. J. All turned brass with Isolantite bushings. Fits into 5-prong socket. This holder has the smoothest plates we've ever seen. Pressure upon the crystal can be regulated. A beautiful and an efficient holder. No. HLC.....\$1.50

We carry a full stock of bakelite, rods and tubing.

BAKELITE PANELS

Black only



No.	Size	Price	No.	Size	Price
832.....	7x10x $\frac{1}{2}$ in.....	\$0.65	842.....	7x10x3/16 in.....	\$0.95
833.....	7x12x $\frac{1}{2}$ in.....	.75	843.....	7x12x3/16 in.....	1.15
834.....	7x14x $\frac{1}{2}$ in.....	.90	844.....	7x14x3/16 in.....	1.35
835.....	7x18x $\frac{1}{2}$ in.....	1.15	845.....	7x18x3/16 in.....	1.75
836.....	7x21x $\frac{1}{2}$ in.....	1.35	846.....	7x21x3/16 in.....	2.00
837.....	7x24x $\frac{1}{2}$ in.....	1.60	847.....	7x24x3/16 in.....	2.25
860.....	10x12x $\frac{1}{2}$ in.....	1.15	863.....	10x12x3/16 in.....	1.74
861.....	10x18x $\frac{1}{2}$ in.....	1.55	864.....	10x18x3/16 in.....	2.34
862.....	10x24x $\frac{1}{2}$ in.....	2.30	865.....	10x24x3/16 in.....	3.45

SPECIAL FOR W9LIP RACK

A special value-plus sales leader—10x21x3/16 in. black bakelite panel. Just right for our racks.....\$2.35

HARD RUBBER PANELS

Black only—3/16 in. thick

No.	Size	Price	No.	Size	Price
800.....	7x10 in.....	\$0.75	803.....	7x18 in.....	\$1.23
801.....	7x12 in.....	.84	804.....	7x21 in.....	1.50
802.....	7x14 in.....	1.02	805.....	7x24 in.....	1.71

BAKELITE TUBING

Black only—1/16 in. wall. O. D. size given

No.	Size	Per Inch	No.	Size	Per Inch
No. 147—1 in.		\$0.05	No. 152—2 $\frac{1}{4}$ in.	.....	\$0.07
No. 148—1 $\frac{1}{4}$ in.		.05	No. 153—2 $\frac{1}{2}$ in.	.....	.08
No. 149—1 $\frac{1}{2}$ in.		.06	No. 154—2 $\frac{3}{4}$ in.	.....	.08
No. 151—2 in.		.06 $\frac{1}{2}$	No. 155—3 in.	.....	.08 $\frac{1}{2}$

FENOLINE TUBING

Black only—1/16 in. wall. O. D. size given

No.	Size	Per Inch	No.	Size	Per Inch
No. 134—1 in.		\$0.03 $\frac{1}{2}$	No. 139—2 $\frac{1}{4}$ in.	.....	\$0.05
No. 135—1 $\frac{1}{4}$ in.		.03 $\frac{1}{2}$	No. 140—2 $\frac{1}{2}$ in.	.....	.06
No. 136—1 $\frac{1}{2}$ in.		.04	No. 141—2 $\frac{3}{4}$ in.	.....	.06
No. 138—2 in.		.04 $\frac{1}{2}$	No. 142—3 in.	.....	.06 $\frac{1}{2}$

SOLID BAKELITE ROD

Black only—Cat. No. I-175

Size	Per 6 in.	Per ft.
$\frac{1}{4}$ in.—Per 6 in.....	\$0.25	\$0.45
$\frac{3}{8}$ in.—Per 6 in.....	.35	.65

SOLID INSULINE ROD

Black only—Cat. No. I-168

Size	Per 6 in.	Per ft.
$\frac{1}{4}$ in.—Per 6 in.....	\$0.18	\$0.35



"MULTIVOLT" TAPPED RESISTORS

Vitreous Enamelled

Size—6x11/16 in.
Rating—50 Watts in Open Air
Furnished with Brackets—
Mounting Centers 7 in.

Size—8 $\frac{1}{2}$ x1 $\frac{1}{4}$ in.
Rating—150 Watts in Open Air
Furnished with Brackets—
Mounting Centers 9 $\frac{1}{4}$ in.

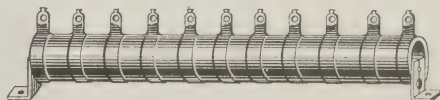
Stock	Resistance	Current	Max.	Price
No.	Ohms	M.A.		
1202	500	316		\$1.29
1203	1,000	223		1.29
1204	2,500	141		1.29
1205	5,000	100		1.29
1206	10,000	70		1.29
1207	15,000	56		1.29
1208	20,000	47		1.29
1209	25,000	40		1.50
These resistors are just the thing for "bleeders." Longer life—no chance of wire breaking.				
1603	1,000	385		\$2.10
1604	2,500	245		2.10
1605	5,000	173		2.10
1606	10,000	122		2.40
1607	15,000	100		2.40
1609	25,000	77		2.40
1611	40,000	50		2.40
1612	50,000	40		2.40
1613	75,000	26		2.85
1614	100,000	17		2.85

ELECTRAD UNIVERSAL

10-Section Vitreous Resistors

200 WATT RATING—1 $\frac{1}{4}$ x10 $\frac{1}{2}$ IN. CERAMIC TUBE

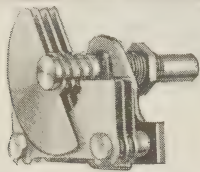
Resist.	Max. M.A.	Price	Resist.	Max. M.A.	Price
500	632	\$2.10	20,000	100	\$2.40
1,000	447	2.10	30,000	81	2.40
5,000	200	2.10	40,000	70	2.40
10,000	141	2.40	50,000	63	2.40



"NET PRICES"

OUR SALES LEADERS

EVERY ONE A GUARANTEED BARGAIN



MIDGET VARIABLE CONDENSERS

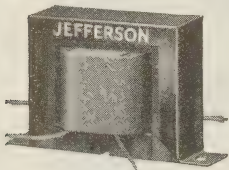
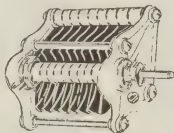
Very good quality.

60 mmf., No. U60.....\$0.39
100 mmf., No. U100......47
Minimum capacity, 3 to 5 mmf.

DOUBLE-SPACED MIDGET CONDENSERS

Value-Plus Bargains

No. UDX35—35 mmf.....\$0.49
No. UDX50—50 mmf......59
Neutralizing Condensers.



NO. 464-201 FILAMENT TRANSFORMER

For 866's

2,250 volts insulation.
2.5 V. C. T.—12.25 Amps.

\$1.14

FILTER CHOKE

18 Henries—150 M.A.—425 Ohms—D.C. Resistance.

No. 466-210

A remarkable buy
at

\$0.99



SWINGING CHOKE

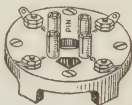
3 to 8 Henries at 150 M.A.—80 Ohms D.C. Resistance.

No. 466-190\$1.19
Matches with No. 466-210, making an ideal filter system (together with proper condensers), for medium power supplies.

LO-LOSS 50-WATT SOCKET

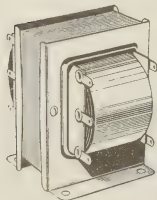
Base is Isotex, metal parts are heavy brass, nickel plated. Positive contacts.

No. B226\$0.59



HEAVY DUTY 210 SOCKET

Made of bakelite. Standard UX base. Ideal for 10's, 866's, etc.
No. 400\$0.29



A DANDY MEDIUM HIGH VOLTAGE TRANSFORMER

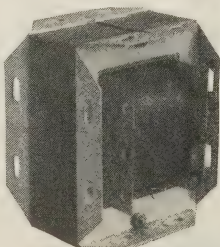
No. BFS-550—550-0-550 volts at 150 M.A. and 5 volts—3 amperes for rectifier....\$2.15

VALUE-PLUS HIGH VOLTAGE TRANSFORMERS

Since our last catalog we've sold hundreds of these two transformers. They are giving universal satisfaction and stand out as the best transformer buys on the market. Guaranteed.

No. F-1000—1,000-750-500-0-500-750-1,000 volts at 300 M.A. Size 3 3/4" x 4 1/2" x 5 1/2" inches.....\$5.95

No. F-1001—800-400-0-400-800 volts at 150 M.A. Size 3 3/4" x 4 1/4" x 3 1/4" inches \$3.95



SECURITY HIGH VOLTAGE FILTER CONDENSERS



These high quality oil-filled condensers are thoroughly guaranteed for six months at their rated voltages. Their appearance is exactly the same as the illustration—heavy metal container with ceramic stand-offs. For universal use wherever high voltage condensers are needed. Your money cheerfully refunded if you are not satisfied with these condensers. Hundreds in use in the Northwest—ask the next Ham you work—he's probably using one or more already. Furnished in the new medium size containers, 4 1/2 inches high.

Notice the low prices!

D.C. Work.			D.C. Work.		
Cap.	Volts	Price	Cap.	Volts	Price
1 mfd....	1,000	\$1.10	2 mfd....	1,500	\$2.00
2 mfd....	1,000	1.50	1 mfd....	2,000	1.75
1 mfd....	1,500	1.45	2 mfd....	2,000	2.45



BONN'S SPECIAL 866's

Absolutely Guaranteed

Each\$1.40
Two for..... 2.75
These are real quality tubes that will give you long service.

SPECIAL H. F. 210

Low-loss ceramic base. Bridge filament support—in other words—a real transmitting type 210. Very good oscillator at high frequencies.....\$1.55



GENUINE MAJESTIC TUBES

Fully Guaranteed

Type 47
\$0.33

Type 46
\$0.33

Type 59
\$0.44

SPECIAL POWER TRANSFORMER

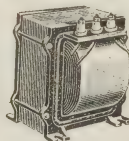
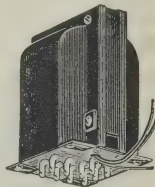
As illustrated on right. In shielded case with lugs on bottom.

No. T6878—600-0-600 volts, 200 M.A.; 5 volts—3 amps.; 7.5 volts—3 amps. C.T.; 2.5 volts—10 amps. C.T. Size 5 in. high, 3 3/4 in. wide, 4 1/4 in. deep.....\$2.45

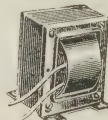
SPECIAL FILTER CHOKE

12 Henries at 250 M.A.; 110 Ohms D.C. Resistance.

No. T6877.....\$1.95



Type EA



Type E



Type V

GENERAL "progressive" audio units; real de luxe units except for open type mounting. You can't go wrong on these quality units at these value-plus prices.

INPUT TRANSFORMERS

Part No.	Pri.	To Couple To	MTG	Class C Stage M. A.	H.	Size D.	W.	Price
3262	P. P. 45's or 2A3's	830 B's, RK 18's Class B	V	.....	3"	2 1/4"	2 1/4"	\$1.50
3272	Single 46 or 59	46's or 59's Class B	V	.....	3"	2 1/4"	2 1/4"	1.65
3276	P. P. 45's or 2A3's	Class B 210's	V	.....	3"	2 1/4"	2 1/4"	1.65

OUTPUT TRANSFORMERS

2340	Class B 800's, 830 B's, RK 18's	5000 or 20000 ohm load	EA	200 or 100	4 3/4"	3 3/4"	3 3/4"	4.95
2344	Class B 46's or 59's	5000 or 10000 ohm load	V	100	3 3/4"	3"	2 3/4"	2.70
2346	Class B 4-46's or 4-59's	500, 3000 or 6000 ohm load	EA	200	4 3/4"	3 3/4"	3 3/4"	4.95
2348	Class B 210's	5000 or 10000 ohm load	EA	200	4 3/4"	3 3/4"	3 3/4"	4.80

FILTER CHOKES—TYPE E

Part No.	Henries	M. A.	Resist D. C. Ohms	Insulation	H.	Size D.	W.	Price
2114	12	200	125	3000	3 1/4"	3 3/4"	2 1/4"	\$2.55
2118	12	300	100	5000	4 1/4"	3 3/4"	3 3/4"	3.60
2122	12	500	100	5000	4 3/4"	4 3/4"	3 3/4"	5.70

SWINGING CHOKES—TYPE E

2116	6-18	20-200	125	3000	3 1/4"	3 3/4"	2 1/4"	2.55
2120	6-18	30-300	100	5000	4 1/4"	3 3/4"	3 3/4"	3.60
2124	6-18	50-500	100	5000	4 3/4"	4 3/4"	3 3/4"	5.70

"NET PRICES"

The Complete Stock Radio Wholesaler

RUSH ORDER

Send All Mail Orders to

LEW BONN CO.

1124 Harmon Place

Main 5313

MINNEAPOLIS, MINN.

TERMS: You may deduct 2% from your cost on all merchandise in this catalog (except on National Co. apparatus) IF your "Cash with Order" order amounts to \$2.00 or over, OR if your C. O. D. order is \$3.00 or over. On all orders not coming up to these specifications, your costs are net—no cash discount allowed. On all orders of less than \$1.00, add 15 cents for a handling charge. All merchandise quoted at prices F. O. B. Minneapolis.

HOW SHALL WE SHIP?

EXPRESS
PARCEL POST
FREIGHT
TRUCK

Be sure to include enough parcel post and insurance money or we will have to ship express collect. Any excess money will be promptly rebated.

ENTER AMOUNT OF REMITTANCE HERE

Paid in full \$

Part paid \$.....

C. O. D. \$

If you send currency be sure to register your letter.

Order No. _____	DO NOT USE THIS SPACE	Date _____
-----------------	-----------------------	------------

Name_____

Address _____

City _____ State _____

[illegible]

HAVE YOU INCLUDED MONEY FOR PARCEL POST AND INSURANCE?

DO NOT USE THIS SPACE	May we substitute parts of equal quality or better if we are out of stock? YES ☐ NO ☐	Total Amount of Order.....	\$	cents
FILLED	PLEASE! use this order blank only for orders. Write other information or questions on separate sheet of paper.	Less 2% if Earned (See "Terms" Above).....		
CHECKED		Total—Net.....		
PACKED	Shall we cancel any back orders necessary and refund or hold back order? REFUND ☐ HOLD ☐	Parcel Post and Insurance.....		
DATE		Total Amount Enclosed.....		
		Balance To Be Shipped C. O. D.		

BONN'S 1936 LIST PRICE CATALOG

of the

"Star Lines of Radio"

LEW BONN CO. RATES ABOUT 10th IN THE U. S. IN VOLUME OF SALES OF RADIO REPLACEMENT PARTS

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Sales Engineer.

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1936 CATALOG

Many catalogs have come to you since August, 1935, but this is the first catalog of the 1936 season with COMPLETE LISTINGS and CORRECT PRICES. Some prices have gone up and some down during the fall season. Every price in here is RIGHT—no chance of us writing and asking for more money on account of increases in prices. Rely on

LEW BONN CO.
Genuine 1936 Catalog

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